



CALL NO. 405

CONTRACT ID. 162151

OHIO COUNTY

FED/STATE PROJECT NUMBER 092GR16P026-CB06

DESCRIPTION CULVERT REPLACEMENTS ON KY 505 AND KY 1414 IN OHIO COUNTY

WORK TYPE CULVERT REPLACEMENT

PRIMARY COMPLETION DATE 9/30/2016

LETTING DATE: April 29,2016

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME April 29,2016. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

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PART I
SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 02

CONTRACT ID - 162151
092GR16P026-CB06
COUNTY - OHIO
PCN - MP09205051601
CB06 092 0505 004-005

OAK GROVE-BAIZETOWN ROAD (KY 505) (MP 4.068) FROM 100 FEET SOUTH OF INDIAN CAMP CREEK
EXTENDING NORTH TO 100 FEET NORTH OF INDIAN CAMP CREEK (MP 4.106), A DISTANCE OF 0.04
MILES.CULVERT REPLACEMENT
GEOGRAPHIC COORDINATES LATITUDE 37:22:18.00 LONGITUDE 86:43:13.00

PCN - MP09214141601
CB06 092 1414 000-001

TAFFY-ADABURG ROAD (KY 1414) (MP 0.680) FROM 0.680 MILES EAST OF US 231 EXTENDING EAST TO 0.11
MILES WEST OF BREY LANE (MP 0.730), A DISTANCE OF 0.05 MILES.CULVERT REPLACEMENT
GEOGRAPHIC COORDINATES LATITUDE 37:32:12.00 LONGITUDE 86:57:45.00

PCN - MP09214141602
CB06 092 1414 002-003

TAFFY-ADABURG ROAD (KY 1414) (MP 2.420) FROM 2.4 MILES EAST OF US 231 EXTENDING EAST TO 0.36
MILES WEST OF KY 1737 (MP 2.479), A DISTANCE OF 0.05 MILES.CULVERT REPLACEMENT
GEOGRAPHIC COORDINATES LATITUDE 37:32:18.00 LONGITUDE 86:55:59.00

PCN - MP09214141603
CB06 092 1414 002-003

TAFFY-ADABURG ROAD (KY 1414) (MP 7.010) FROM 7.04 MILES EAST OF US 231 EXTENDING EAST TO
9710FEET WEST OF BUNCH LANE (MP 7.060), A DISTANCE OF 0.05 MILES.CULVERT REPLACEMENT
GEOGRAPHIC COORDINATES LATITUDE 37:33:41.00 LONGITUDE 86:52:36.00

COMPLETION DATE(S):

COMPLETED BY 09/30/2016	SPECIFIED COMPLETION DATE - ALL ITEMS IN CONTRACT
COMPLETED BY 08/08/2016	CULVERTS REPLACED AND ROADWAY RESTORED THROUGH ASPHALT BASE
0 CALENDAR Hours	ROAD CLOSURES EXCEEDING TIME ALLOWED BY TRAFFIC CONTROL PLAN

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provision of the act.

SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2012 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by [KRS 14A.9-010](#) to obtain a certificate of authority to transact business in the

Commonwealth (“certificate”) from the Secretary of State under [KRS 14A.9-030](#) unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in [KRS 14A.9-010](#), the foreign entity should identify the applicable exception. Foreign entity is defined within [KRS 14A.1-070](#).

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity’s solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at <https://secure.kentucky.gov/sos/ftbr/welcome.aspx>.

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading “Questions & Answers” on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

02/24/16

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

Reciprocal preference to be given by public agencies to resident bidders

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the Expedite Bidding Program. Submittal of the Affidavit should be done along with the bid in Bid Express.

03/01/2011

EXPEDITE PROJECT WORK ORDER

The Contractor may request that the Department expedite the work order for this project to allow for maximization of time to complete the work. In order for the Department to accomplish this task, the Contractor may be required to “hand carry” all required project documentation to facilitate the process. Immediately UPON NOTIFICATION OF AWARD OF THE CONTRACT, deliver required project documentation to:

Division of Construction Procurement
200 Mero St.
Frankfort, KY 40602

SURFACING AREAS

The Department has not determined mainline and shoulder surfacing areas. The Engineer will determine mainline and shoulder widths and surfacing areas at the time of Construction. See Milling Summary and Typical Sections for approximate dimensions.

ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

DGA BASE

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

OPTION B

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

SPECIAL NOTES FOR CULVERT REPLACEMENTS 092GR16P026-CB06

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's 2012 Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Section references are to the Standard Specifications. Furnish all labor, equipment, materials, and incidentals for the following work:

(1) Site preparation and Erosion Control; (2) Designing, furnishing, and constructing Structural Plate Pipe Arch and Structural Plate Box Culverts; (3) Excavation, backfill, and construction of embankments; (4) Restoring roadway, pavement, and shoulders; (5) Installing guardrail, guardrail end treatments, and terminal sections; (6) Maintaining and controlling traffic; and (7) any other work as specified by this contract.

II. MATERIALS & DESIGN.

Except as provided herein, provide materials conforming to Sections 603, 612, 701, 809, and the Special Note for Aluminum and Steel Structural Plate Box Culvert, as applicable. The Department will sample and test all materials in accordance with the Department's Sampling Manual. Unless specified otherwise in these notes, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See Special Notes for Erosion Control Plan.

C. Foundation Preparation. For Structural Plate Box Culverts, use Crushed Limestone Size No. 57 wrapped in Type III Geotextile Fabric. For Structural Plate Pipe Arch furnish materials according to Section 701.02.04 and 701.03.02 and Standard Drawings RDI-020-08 and RDI-025-04 as applicable.

D. 114 Inch Equivalent Culvert. Furnish Bituminous Coated Steel or Aluminum Structural Plate Pipe Arch according to Section 809 and Standard Drawings RDI-12-02 and RDI-016-02 for 2 feet fill cover height, pH range low, 0° skew. Provide for a manufacturer's representative to be available on site during structural plate pipe arch assembly, installation, and backfilling.

Consider the drawings in the proposal to be conceptual and preliminary only. Prior to fabrication, verify fill cover height and pipe arch lengths and submit to the Engineer and obtain approval of the manufacturer's designs and shop drawings prepared by a Professional Engineer licensed in Kentucky. Obtain the Engineer's approval of any substitution prior to fabrication and/or construction as applicable. Include with each shipment of the structural

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plates and accessories a certification that all materials furnished comply with the applicable specifications and these special notes.

E. 114 Inch Equivalent Culvert Headwalls. Use Class A Concrete and Grade 60 Steel reinforcement according to Section 610.02 for headwalls with aprons and paving. Prior to construction, modify the standard drawings as required to match field conditions and culvert alternate, submit to the Engineer, and obtain approval of the modified design prepared by a Professional Engineer licensed in Kentucky. Obtain the Engineer's approval of any substitution prior to construction as applicable.

F. Structural Plate Box Culverts. Furnish Steel or Aluminum Structural Plate Box Culverts with invert, end walls, wing walls, and toe walls according to the Special Note for Aluminum and Steel Structural Plate Box Culverts designed by the manufacturer for 2 feet fill cover height, 0° skew, with an HS25 loading arrived at by increasing the standard HS20-44 truck and lane loads as specified in the AASHTO Specifications by 25%. Provide for a manufacturer's representative to be available on site during culvert assembly, installation and backfilling.

Consider the drawings in the proposal to be conceptual and preliminary only. Prior to fabrication, verify the fill cover height and box culvert length, submit to the Engineer, and obtain approval of the manufacturer's design and shop drawings prepared by a Professional Engineer licensed in Kentucky. Obtain the Engineer's approval of any substitution prior to fabrication and/or construction as applicable. Include with each shipment of the structural plates and accessories a certification that all materials furnished comply with the applicable specifications and these special notes.

G. Culvert Backfill. Use flowable fill.

H. Channel Lining. Use Class III Channel Lining

I. Guardrail. See Special Notes for Guardrail.

J. Surfacing and Shoulder Materials. Use DGA (do not furnish Crushed Stone Base in lieu of DGA) with Class 2 Asphalt Base 1.00D PG64-22 and Class 2 Asphalt Surface 0.38D PG64-22.

III. CONSTRUCTION METHODS

Except as provided herein, construct Structural Plate Pipe Arch and Structural Plate Box Culvert according to Sections 603, 612, 701, and the Special Note for Aluminum and Steel Structural Plate Box Culvert, as applicable

A. Maintain and Control Traffic. See Traffic Control Plan.

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B. Erosion Control. See Special Notes for Erosion Control.

C. Site Preparation. Be responsible for all site preparation, including, but not limited to: clearing and grubbing and tree and stump removal; structure, common, solid rock, and special excavation; structural granular backfill, embankment, borrow, and embankment in place; removal of existing culverts, obstructions or any other items; disposal of materials, waste, and debris; ditching, and cleaning inlet and outlet ditches; restoration, clean up, and final dressing. Limit clearing and grubbing to the absolute minimum required to construct the culvert, roadway approaches, and guardrail. Obtain the Engineer's prior approval before removing any trees. Perform all site preparation only as approved or directed by the Engineer. Contrary to Section 719.03.07, deliver guardrail system components deemed salvageable by the Engineer to the Department's Ohio County Maintenance Facility.

Construct Pipe Arch and Box Culverts at the approximate existing locations of the existing structures; the Engineer will determine the exact locations at the time of construction. Prior to excavation for trenches for culvert removal and construction of the new culverts, saw cut pavement to a neat edge. Obtain the Engineer's approval of the trench widths prior to saw cutting pavement. Close the road during the approved periods allowed by the Traffic Control Plan, excavate trenches, and remove the existing culverts. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Stockpile excavation within the right of way for reuse in constructing embankments. Obtain the Engineer's approval of the suitability of excavated materials before reusing in the embankments. Use excess suitable excavation to flatten slopes as approved or directed by the Engineer. Waste unsuitable and remaining excess excavation and other removed materials at sites off the right of way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow). Perform all excavation and removal of existing structure only as approved or directed by the Engineer.

Without regard to the materials encountered, consider all roadway, drainage, solid rock, and special excavation to be unclassified. It shall be distinctly understood that any reference to rock, earth, or any other material on the plans or cross sections, whether in numbers, words, letters, or lines, is solely for the Department's information and is not to be taken as an indication of classified excavation or the quantity of either rock, earth, or any other material involved. The bidder must draw his own conclusions as to the conditions to be encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the materials encountered are not in accord with the classification shown.

D. Excavation and Removal of Existing Structures. Completely remove the existing culverts, including masonry (stone and/or concrete), if present. Be responsible for all excavation (structure, common, rock, and unclassified) required for foundation preparation and all other excavation required by the work. Excavate rock in channel as required to allow for construction of foundation and installation of culvert with the designed fill cover height. If suitable excavation is not sufficient, obtain borrow from sites off the right of way obtained by the Contractor at no additional cost to the Department. Waste excess and unsuitable

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excavation off the right of way at no additional cost to the Department at sites off the right of way obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow). Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Perform all excavation only as approved or directed by the Engineer.

E. Foundation Preparation and Bedding. Except as provided herein, prepare foundation and bedding for the Structural Plate Box Culverts according to the Special Note for Aluminum and Steel Structural Plate Box Culverts; however provide a minimum depth of 18 inches of No. 57 crushed limestone wrapped in Geotextile Fabric Type III.

Except as provided herein, prepare foundation and bedding for the Pipe Arches according to Section 701.03 and Standard Drawings RDI-020-08 and RDI-025-04 as applicable.

F. Structural Plate Pipe Arch, and Structural Plate Box Culverts. Construct Equivalent Structural Plate Pipe Culvert according to the manufacturer's design with reinforced concrete headwalls as shown on the typical section. Construct Structural Plate Box Culverts according to the manufacturer's design with end walls, wing walls, invert, and toe walls as shown on the typical sections. Be responsible for field layout and survey of the approved pipe arch and box culverts according to the approved designs furnished by the Contractor, or the standard drawings, as applicable. Provide for a manufacturer's representative to be present during assembly, construction, and backfilling of the Structural Plate Pipe Arch and Structural Plate Box Culverts. Obtain the Engineer's approval of the final centerline, flow line, length, skew, and wing wall alignment prior to backfilling. Provide positive drainage upon completion of the project.

G. 114 Inch Equivalent Culvert Headwalls. Construct reinforced concrete headwalls according to the Contractor's approved design according to Section 610.03. Apply Ordinary Surface Finish according to Section 601.03.18.

H. Backfill and Embankments. Construct flowable fill backfill to the subgrade elevation. Complete the remainder of the embankments with approved suitable excavation and/or embankment in place. Use excess suitable excavation to flatten slopes as approved or directed by Engineer. Warp finished slopes to match existing slopes and ditches. Provide positive drainage of slopes and ditches at all times during and upon completion of construction.

I. Channel Lining. Place Class III Channel Lining to protect culvert ends, wing walls, and slopes as directed by the Engineer. In addition to the requirements of section 703, the Engineer may require additional hand placement.

J. Pavement and Shoulder Restoration. Establish width, crown, superelevation and final grade lines as shown on the typical section or as directed by the Engineer.

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After the culverts are completed and backfilled and embankments constructed through the asphalt base course, place 4" of DGA and 5 inches of asphalt base and seal the asphalt base with leveling and wedging to match the existing pavement profile on each side of the culvert trench before reopening the roads to through traffic according to the phasing in the Traffic Control Plan. Allow the asphalt base to compact under traffic until the Engineer determines the asphalt base is sufficiently stabilized (a minimum of seven calendar days after traffic is placed on the final course of asphalt base). Correct settlement with additional leveling and wedging as directed by the Engineer. When the Engineer determines the base is sufficiently stabilized, mill one inch overall and construct final surface course and shoulders. See additional requirements in the Traffic Control Plan and the Special Note for Liquidated Damages.

K. Guardrail. See Special Notes for Guardrail.

L. Final Dressing and Clean Up. After all work is completed, completely remove all waste and debris from the construction worksite. Backfill all excavated areas and compact as directed by the Engineer. Perform Class A Final Dressing on all disturbed areas, both on and off the right of way. Sow all disturbed earthen areas according to the Special Note for Erosion Control.

M. On-Site Inspection. Make a thorough inspection of the site prior to submitting bid and be thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made. The Department will not consider any claims resulting from site conditions.

N. Right-of-Way Limits. The Department has not determined exact Right-of-Way limits. Limit work activities and operations to obvious existing Right-of-Way, Permanent Easements, and work areas obtained by the Department through consent and release of the adjacent property owners. Be responsible for encroachments onto private lands.

O. Utilities. Locate all underground and overhead utilities prior to construction. Be responsible for repairing all utility damage that occurs as a result of the Contractor's operations at no additional cost to the Department.

P. Restoration. Be responsible for all damage to public and/or private property resulting from the work. Remove and replace all damaged or disturbed roadway features in like kind materials and design at no additional cost to the Department.

Q. Disposal of Waste. Dispose of all removed pipe, stone masonry, concrete and reinforcing steel, pavement, debris, unsuitable and excess excavation, and other waste off the right-of-way at sites obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow).

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R. Caution. Consider the information shown on the plans and the type of work listed herein as approximate only and do not take the information as an accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw his own conclusions. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for if the conditions encountered are not in accordance with the information shown.

S. Control. Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor and/or the manufacturer and design modifications proposed by the Contractor or Manufacturer prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction of and within the limits of, or adjacent to, the project. Conduct work activities and operations in cooperation with such other parties so that interference with such other work will be reduced to a minimum. The Department will consider submission of a bid as Contractor's agreement to not make any claims for additional compensation due to delays or other conditions created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

T. Staking. See Special Note for Staking.

IV. METHOD OF MEASUREMENT

The Department will measure for payment only the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See Special Notes for Erosion Control.

C. Site Preparation. The Department will measure Site Preparation as one lump sum.

D. Structural Plate Pipe Arch and Structural Plate Box Culverts. The Department will measure the Pipe Arch and Box Culverts of each type in linear feet along the culvert centerline. The Department will not measure box culvert wing walls, end walls, invert, or toe walls; box culvert or structural plate pipe arch design; bedding, flowable fill, and backfill; and furnishing the manufacturer's technical representative for separate payment, but shall be incidental to the Structural Plate Box Culvert, Structural Plate Pipe Arch, or Site Preparation as applicable.

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E. 114 Inch Equivalent Culvert Headwalls. Contrary to Sections 610.04.01 through 610.04.04, the Department will not measure Concrete, Steel Reinforcement, Structure Excavation, or removal of the existing structure. The Department will measure the reinforced concrete headwalls in individual units Each.

F. Foundation Preparation. The Department will measure Foundation Preparation for the Structural Plate Box Culverts as one lump sum. The Department will not measure Foundation Preparation for the Structural Plate Pipe Arch, but shall be incidental to the pipe arch.

G. Excavation, Backfill, and Embankment. The Department will not measure excavation, backfill, embankment, borrow, or embankment in place for separate payment, but shall be incidental to Site Preparation and Foundation Preparation as applicable.

H. Channel Lining Class III. The Department will measure Channel Lining Class III in tons.

I. Guardrail. See Special Notes for Guardrail.

J. Staking. See Section 201.04.01

V. BASIS OF PAYMENT

The Department will make payment only for the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Erosion Control. See special Note for Erosion Control.

C. Site Preparation. Accept payment at the contract lump sum unit price as full compensation for all materials, equipment, labor, and incidentals, necessary to complete site preparation as specified in these notes and the Standard Specifications, including, but not limited to: clearing and grubbing and tree and stump removal; structure, common, solid rock, and special excavation; backfill, embankment, borrow, and embankment in place; removal of existing culverts, obstructions or any other items; disposal of materials, waste, and debris; ditching and cleaning inlet and outlet ditches; restoration, clean up, and final dressing.

D. Structural Plate Pipe Arch and Structural Plate Box Culverts. Accept payment at the contract unit prices per linear foot as full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified in these notes and the Standard Specifications for box culvert and structural plate pipe arch design, furnishing and installing the box culvert, pipe arch, and structural plate pipe arch and furnishing the manufacturer's technical representative.

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E. 114 Inch Equivalent Culvert Headwalls. Accept payment at the contract unit price Each as full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified in these notes and the Standard Specifications for headwall design modifications and constructing the headwall.

F. Guardrail. See Special Notes for Guardrail.

G. Staking. Accept payment at the contract lump sum unit price as full compensation for all materials, equipment, labor, and incidentals, necessary to complete the staking according to the Special Note for Staking, Section 201, and these notes.

SPECIAL NOTE FOR STAKING
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In addition to the requirements of Section 201, perform the following:

1. Contrary to Section 201.03.01, perform items 1-3 usually performed by the Engineer; and
2. Verify the Structural Plate Pipe Arch and Structural Plate Box Culvert sections and revise alignments as necessary to provide proper alignment of culverts with stream channels and the roadway lines and grades, and provide positive drainage upon completion of construction; and
3. Modify and verify Structural Plate Pipe Arch Headwall design to conform to the culvert alternate and construction site.
4. Prior to incorporating into the work, obtain the Engineers approval of all designs and revisions provided by the Contractor; and
5. Establish pavement profiles, typical section cross slopes, crown, transitions, and tapers to align the pavement restoration to match existing roadway alignment as required by the work and to insure positive drainage upon completion of the work; and
6. Produce and furnish to the Engineer "As Built" plans; and
7. Perform any and all other staking operations required to control and construct the work.

SPECIAL NOTE FOR LIQUIDATED DAMAGES
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In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of \$200 per hour for each hour or part of an hour, for each site, that KY 505 or KY 1414 remains closed to through traffic beyond the time allowed for road closures by the Traffic Control Plan.

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount specified in Section 108.09 for each site, that any culvert replacement and roadway restoration remains uncompleted through the asphalt base course on KY 505 and KY 1414 after August 8, 2016.

Contrary to Sections 108.07.02 and 108.09, the Department will assess Liquidated Damages as specified above for the months of December through March, regardless of whether seasonal or temperature limitations prohibit the Contractor from performing work on the controlling item or operation.

The Department will apply all liquidated damages accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

Obtain U.S. Army Corps of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". The Corps of Engineers defines "Waters of the United States" as perennial or intermittent streams, ponds or wetlands. The Corps of Engineers also considers ephemeral streams, typically dry except during rainfall but having a defined drainage channel, to be jurisdictional waters. Direct questions concerning any potential impacts to "Waters of the United States" to the attention of the appropriate District Office for the Corps of Engineers for a determination prior to disturbance. Be responsible for any fees associated with obtaining approval for waste and borrow sites from the U.S. Army Corps of Engineer or other appropriate regulatory agencies.

1-296 Waste & Borrow Sites
01/02/2012

SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER MONOLITHIC OPERATION

1.0 MATERIALS. Provide an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.

2.0 CONSTRUCTION. Place the specified Asphalt Surface Mixture on shoulders monolithically with the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Section 403.03 of the Standard Specifications.

Equip the paver with a modified screed that extends the full width of the wedge being placed and is tapered to produce a wedge. Obtain the Engineer's approval of the modified screed before placing shoulder wedge monolithically with the driving lane.

The wedge may vary in thickness at the edge of the milled area in the shoulder. If the area to receive the shoulder wedge is milled prior to placement, during rolling operations pinch the outside edge of the new inlay wedge to match the existing shoulder elevation not being resurfaced. Unless required otherwise by the Contract, construct rolled or sawed rumble strips according to Section 403.03.08, as applicable.

The following sketch is primarily for the computation of quantities; however, the wedge will result in a similar cross-section where sufficient width exists. Do not construct a shoulder for placing the wedge unless specified elsewhere in the Contract.



3.0 MEASUREMENT. The Department will measure Asphalt Surface Mixture placed as the pavement wedge according to Section 403.

4.0 PAYMENT. The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures on pavement wedges according to Section 403.

SPECIAL NOTE FOR SHOULDER PREPARATION

Grade, shape, and compact shoulder as shown on the typical section and as directed by the Engineer to provide proper template and foundation for the shoulder resurfacing. The Department will not measure grading, shaping, and compacting shoulders for separate payment, but shall be incidental to the asphalt base and/or surface placed on the shoulder.

1-3245 Shoulder Preparation Contractor
01/02/2012

SPECIAL NOTES FOR GUARDRAIL 092GR16P026-CB06

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's 2012 Standard and Supplemental Specifications and Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications.

Furnish all equipment, labor, materials, and incidentals for the following work items:

(1) Maintain and Control Traffic; (2) Shoulder preparation; (3) Install Guardrail furnished by the Department; (4) Furnish and install End Treatments, Terminal Sections, and Delineators for Guardrail; and (5) All other work specified as part of this contract.

II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

A Maintain and Control Traffic. See Traffic Control Plan.

B. Guardrail. The Department will furnish guardrail elements and radius rail, standard length steel posts, and timber off set blocks in general conformance to Section 814 and the Standard and Sepia Drawings, but may vary in some respects, such as gage, pre-punched hole patterns, etc. The Department will make the materials available to the Contractor at the Department's Bailey Bridge Yard in Frankfort, Kentucky, between the hours of 8:00 a.m. and 3:30 p.m. Monday through Friday. Determine requirements, including curvature of radius rail, and provide the Engineer a materials list fourteen (14) calendar days prior to beginning work. Return any materials furnished by the Department not used in the work to the Department's Ohio County maintenance facility.

The Contractor shall furnish End Treatments and guardrail hardware (nuts, bolts, and washers) in accordance with Section 814 and the Standard Drawings.

C. Delineators for Guardrail. Furnish bi-directional white Delineators for Guardrail according to the Delineators for Guardrail Sepia Drawing.

Guardrail
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III. CONSTRUCTION METHODS

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. Be responsible for all site preparation, including but not limited to, removal of all obstructions. Reshape and compact the existing and constructed shoulders to provide proper template and foundation for the guardrail. Perform all site preparation as approved or directed by the engineer.

C. Install Guardrail. Except as specified herein, install materials furnished by the Department and construct guardrail system according to Section 719 and the Standard and Sepia Drawings. Consider locations and quantities listed on the summary to be approximate only. Consider the shoulder widths shown on the typical section to be the minimum required. The Engineer will determine the exact termini for individual guardrail installations and may increase the shoulder width as allowed by site conditions at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width.

Erect guardrail to the lines and grades shown on current Standard Drawings or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags. If a post location directly over the Structural Plate Pipe Arch or Structural Plate Box Culvert does not have adequate depth for the full length of the post embedment required, omit the post and construct 25 feet of 2 ply rail at that location centered over the omitted post. Locate the posts in the rail string such that only 1 post need be omitted. The Engineer may allow a slight variation in post spacing to accommodate an omitted post by requiring placement of adjacent posts to minimize the gap if the gap exceeds 12'-6".

When installing guardrail, do not leave blunt ends exposed where they would be hazardous to the public. When it is not practical to complete the construction of the guardrail and the permanent end treatments and terminal sections first, provide a temporary end by connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, place a drum with bridge panel in advance of the guardrail end and maintain during use.

D. Delineators for Guardrail. Construct Delineators for Guardrail according to the Delineators for Guardrail Sepia Drawing.

E. Property Damage. Be responsible for all damage to public and/or private property, including utilities, resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.

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F. Coordination with Utility Companies. Locate all underground and overhead utilities prior to erecting guardrail. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.

G. Right of Way Limits. The Department has not established exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.

H. Disposal of Waste. Dispose of all waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department.

IV. METHOD OF MEASUREMENT

Except as provided herein, the Department will measure all work in accordance with the Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. The Department will measure only the bid items listed. Consider all other items required to complete the work as incidental to the listed items.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. See Special Note for Culvert Replacements.

C. Guardrail, Steel W Beam Single Face, Install. The Department will measure the actual length of guardrail furnished by the Department and installed by the Contractor. Contrary to section 719.04.01, the Department will measure the actual length of shop curved guardrail in linear feet and will not multiply the actual length by a factor of 1.3 to determine the pay quantity. The Department will not make deduction for an omitted post or measure 2 ply rail elements required to reinforce the gap for an omitted post.

D. Guardrail Hardware. The Department will not measure guardrail hardware for separate payment but shall be incidental to Guardrail, Steel W Beam Single Face, Install.

E. End Treatments. See Section 719.04.04.

F. Delineators for Guardrail. See Delineators for Guardrail Sepia Drawing.

V. BASIS OF PAYMENT

Except as provided herein, the Department will make payment for only the bid items listed. Consider all other items required to complete the work as incidental to the listed items.

Guardrail
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A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. See Special Note for Culvert Replacements.

C. Guardrail, Steel W Beam Single Face, Install. See Section 719.05.

D. End Treatments. See Section 719.05.

E. Delineators for Guardrail. See Delineators for Guardrail Sepia Drawing.

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

Begin paving operations within **two weeks** of commencement of the milling operation. Continue paving operations continuously until completed. If paving operations are not begun within this time period, the Department will assess liquidated damages at the rate prescribed by Section 108.09 until such time as paving operations are begun.

Take possession of the millings and recycle the millings or dispose of the millings off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department.

1-3505 2 weeks Contractor keeps millings
01/2/2012

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

Consider the dimensions shown on the typical sections for pavement and shoulder widths and thickness' to be nominal or typical dimensions. The Engineer may direct or approve varying the actual dimensions to be constructed to fit existing conditions. Do not widen existing pavement or shoulders unless specified elsewhere in this proposal or directed by the engineer.

1-3725 Typical Section Dimensions
01/02/2012

TRAFFIC CONTROL PLAN

092GR16P026-CB06

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2012 Standard and Supplemental Specifications, Special Provisions and Special Notes, and the Standard and Sepia Drawings, current editions. Section references are to the Standard Specifications. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, provide new traffic control devices, or used in like new condition, at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Close KY 505 and KY 1414 to through traffic for removal of the existing culverts, construction of the new Structural Plate Pipe Arch and Structural Plate Box Culverts, roadway restoration, and guardrail subject to the following conditions:

1. Close each site to through traffic for a single period for a maximum of 228 hours beginning at 6:00 PM Friday and ending at 6:00 a.m. Monday of the week following. The Department will permit only one road closure at a time on KY 1414. The Department will permit concurrent road closures on KY 505 and KY 1414. The Department will not permit road closures on days Ohio County Schools are in regular session. Select periods within this time frame and submit to the Engineer for approval a minimum of fourteen (14) calendar days prior to proposed closure. Obtain the Engineer's approval of the work schedule prior to closing road. Complete removal and backfilling of the existing structure, construction of the new structures, embankment, shoulders, DGA and asphalt base with initial leveling and wedging during the allowable period; however, do not place the final asphalt surface course until the Engineer determines the base is sufficiently stabilized.
2. The Department will prepare a Public Information Plan for each road. Notify the Engineer immediately and obtain prior approval of any deviations from the previously approved closure schedules.
3. Be responsible for advance warning signs, road closure signs, barricades, drums, work zone and pavement condition warning signs as shown on the Standard Drawings and additional signs as directed by the Engineer. If deemed necessary by the Engineer, the Department will sign and maintain a detour during construction.

Traffic Control Plan
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4. The Department will not require the Contractor to provide continuous access to single family, duplex, or triplex residential properties or farms during working hours; however, the Contractor shall provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a residential or farm entrance is blocked to the minimum length of time required for actual operations, do not extend the time for the Contractor's convenience, and in no case allow the blockage to exceed six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.
5. Do not reopen KY 505 or KY 114 270 to through traffic before placing asphalt base course and initial leveling and wedging. Do not maintain traffic on DGA.

At all other times during construction, maintain alternating one way traffic during working hours and maintain one lane of traffic in each direction during non-working hours. Provide a clear lane width of 8 feet; however, make provisions for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

Take these restrictions into account in submitting bid. The Department will not consider any claims for money or grant contract time extensions for any delays to the Contractor as a result of these restrictions.

BLASTING

If required, perform blasting only during a period when a road is closed to through traffic. Halt local traffic, blast, clean the existing pavement, and return traffic to normal local traffic operation subject to the following conditions:

1. Halt all local traffic at a safe distance, as determined by the Engineer, on either side of the impending explosion.
2. Halt traffic a maximum of 15 minutes per hour to allow the execution of the "shot" and to allow for removal of rock fragments and debris.
3. Have suitable equipment at the site and in a running mode for the purpose of cleaning the existing pavement.
4. Immediately after any blast, inspect the pavement for any debris that may be a hazard to traffic prior to allowing local traffic to proceed. Return local traffic to normal operation in the least amount of time possible.

LANE & SHOULDER CLOSURES

When a road is open to through traffic, do not leave lane closures in place during non-working hours. Except as specified in the phasing above, maintain lane closures only during hours of actual operations. Reduce Lane closures to a shoulder closure, or remove as appropriate, when active operations do not require a lane closure. The Engineer will allow shoulder closures during non-working hours; however do not park equipment or store materials on a closed shoulder during non-working hours. After the Structural Plate Pipe Arch and/or the Structural Plate Box Culvert have been installed and a road reopened to through traffic, maintain a shoulder closure until guardrail is installed at the site. The Engineer may designate days and hours when lane and/or shoulder closures will not be allowed.

SIGNS

Contrary to section 112.04.02, the Department will measure only long term signs (signs intended to be continuously in place for more than 3 days) for payment. The Department will not measure short term signs (signs intended to be left in place for 3 days or less) for separate payment but shall be incidental to Maintain and Control Traffic. The Department will measure individual signs only once for payment, regardless of how many times they are set, reset, relocated, and removed during the duration of the project. The Department will not measure replacements for signs directed by the Engineer to be replaced due to damage, poor condition, or inadequate reflectivity.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used to protect pavement removal areas and road closures in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of the work.

CHANGEABLE MESSAGE SIGNS

If deemed necessary by the Engineer, the Department will furnish, operate, and maintain changeable message signs.

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TRAFFIC COORDINATOR

Furnish a Project Traffic Coordinator for an unclassified project according to Section 112.03.12. The Project Traffic Coordinator shall provide for inspection of the project maintenance of traffic a minimum of once every two hours during the Contractor's operations and at any time a lane or road closure is in place. Provide the project personnel with access on the project to a radio or telephone to be used in case of emergencies or accidents.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping patterns, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary and Permanent Striping according to Section 112 with the following exception:

If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place warning signs (MUTCD WY-11 or WE-9A) in advance of and at 1500 foot intervals throughout the drop-off area. Provide dual posting on both sides of the traveled way. Wedge transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for Leveling and Wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges and other drop-offs that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the use of cones in lieu of plastic drums, panels, and barricades. Wedge drop-off with DGA or asphalt mixture for Leveling and Wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

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Culvert Trench - Close a road during allowable periods when culvert trench is open. Protect local traffic by placing Type III Barricades directly in front of the trench facing both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer. When a road is reopened after installation of the pipe arches or culverts, maintain shoulder closures until guardrail is erected.

Pedestrian and Bicycle Traffic - Provide protection for pedestrian and bicycle traffic as directed or approved by the Engineer.

SPECIAL NOTE FOR EROSION CONTROL 092GR16P026-CB06

I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with the Department's 2008 Standard Specifications, these notes, and interim Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Section references are to the Standard Specifications. This work shall consist of:

(1) Developing and preparing a Best Management Practices Plan (BMP) tailored to suit the specific construction phasing for each site within the project; (2) Preparing the project site for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

II. MATERIALS

Furnish materials in accordance with these notes, the Standard Specifications and interim Supplemental Specifications, and applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless directed otherwise by the Engineer, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

III. CONSTRUCTION

Be advised, these Erosion Control Plan Notes do not constitute a BMP plan for the project. Jointly with the Engineer, prepare a site specific BMP plan for each drainage area within the project in accordance with Section 213 and the supplemental specifications. Provide a unique BMP at each project site using good engineering practices taking into account existing site conditions, the type of work to be performed, and the construction phasing, methods and techniques to be utilized to complete the work. Be responsible for all erosion prevention, sediment control, and water pollution prevention measures required by the BMP for each site. Represent and warrant compliance with the Clean Water Act (33 USC Section 1251 et seq.), the 404 Permit, the 401 Water Quality

Special Note for Erosion Control
092GR16P026-CB06
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Certification, and applicable state and local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between these notes, the Standard Specifications, interim Supplemental Specifications, Special and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work.. Preserve existing vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. Remove sediment from silt traps before they become a maximum of ½ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow).

As work progresses, add or remove erosion control measures as required by the BMP applicable to the Contractor's project phasing and construction methods and techniques. Update the volume calculations and modify the BMP as necessary throughout the duration of the project. Ensure that an updated BMP is kept on site and available for public inspection throughout the life of the project.

After all construction is complete, restore all disturbed areas in accordance with Section 212. completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right of-Way) as nearly as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

Special Note for Erosion Control
FD52 057 3433 001-002
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IV. MEASUREMENT

Erosion Control Blanket. If required by the BMP, the Department will measure Erosion Control Blanket according to Section 212.04.07.

Sodding. If required by the BMP, the Department will measure Sodding according to Section 212.04.08.

Channel Lining. If required by the BMP, the Department will measure Channel Lining according to Sections 703.04.04-703.04.07.

Erosion Control. Contrary to Sections 212.04 and 213.04, other than Erosion Control Blankets, Sodding, and Channel Lining, the Department will not measure Erosion Control, developing, updating, and maintaining a BMP plan for each site; providing a KEPSC qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; and Temporary Ditches and clean Temporary Ditches; and all other erosion and water pollution control items required by the BMP or the Engineer, but shall be incidental to DGA, Guardrail, Extra Length Posts, End Treatments, and Terminal Sections, as applicable.

V. BASIS OF PAYMENT

Erosion Control Blanket. If not listed as a bid item, but required by the BMP, the Department will pay for Erosion Control Blankets as Extra Work according to Sections 104.03 and 109.04.

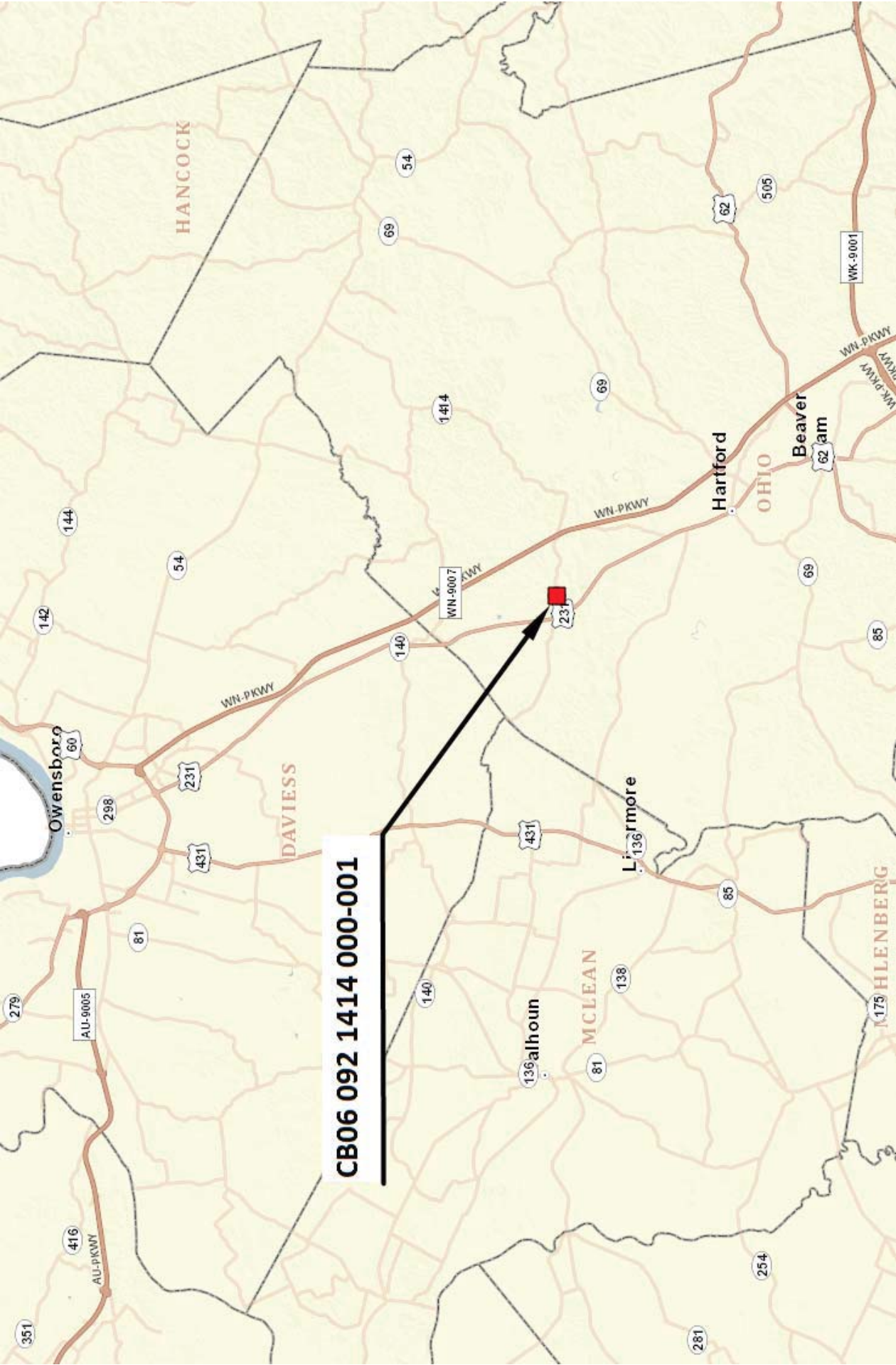
Sodding. If not listed as a bid item, but required by the BMP, the Department will pay for Sodding as Extra Work according to Sections 104.03 and 109.04.

Channel Lining. If not listed as a bid item, but required by the BMP, the Department will pay for Channel Lining as Extra Work according to Sections 104.03 and 109.04.

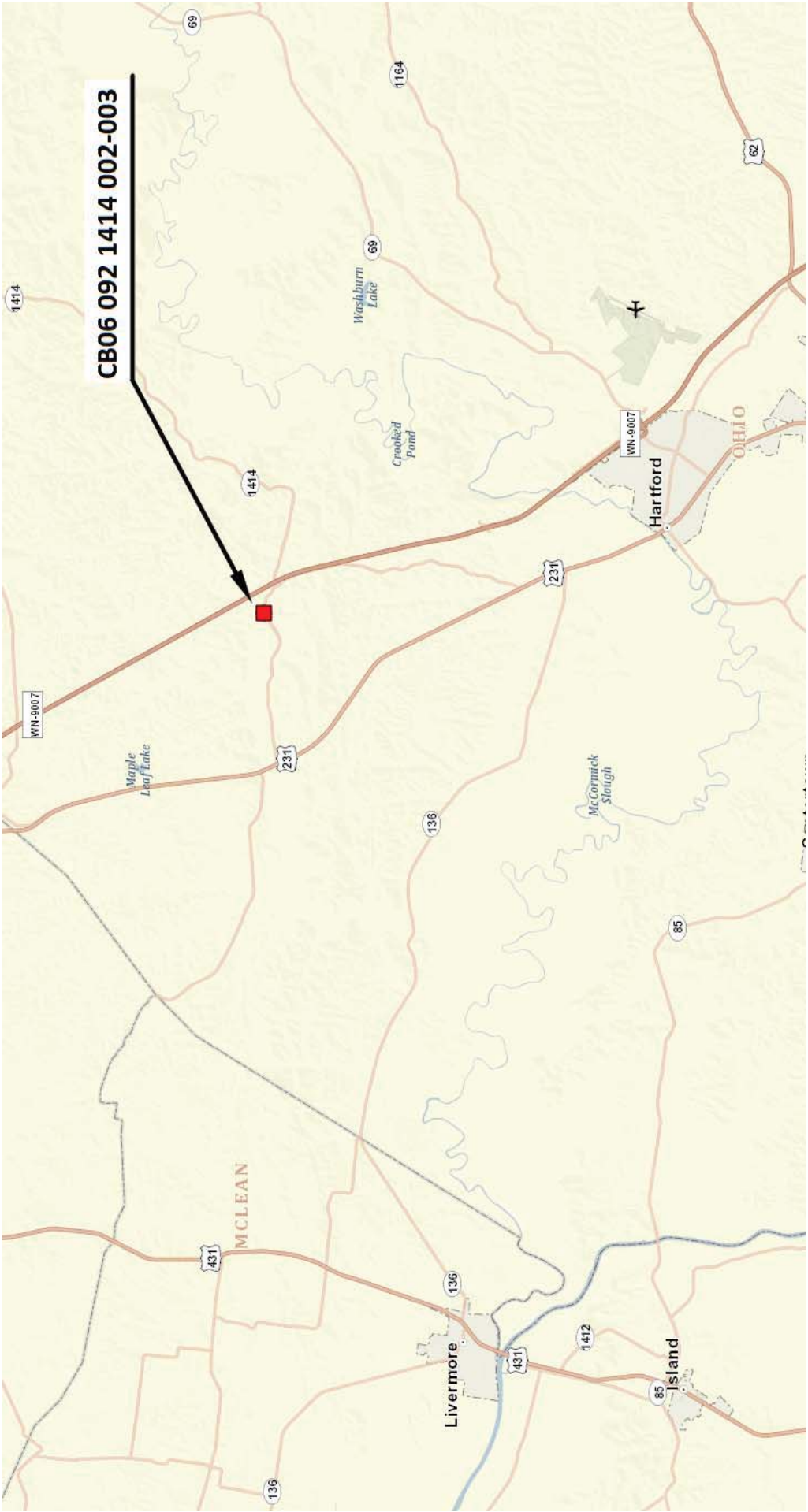
OHIO COUNTY



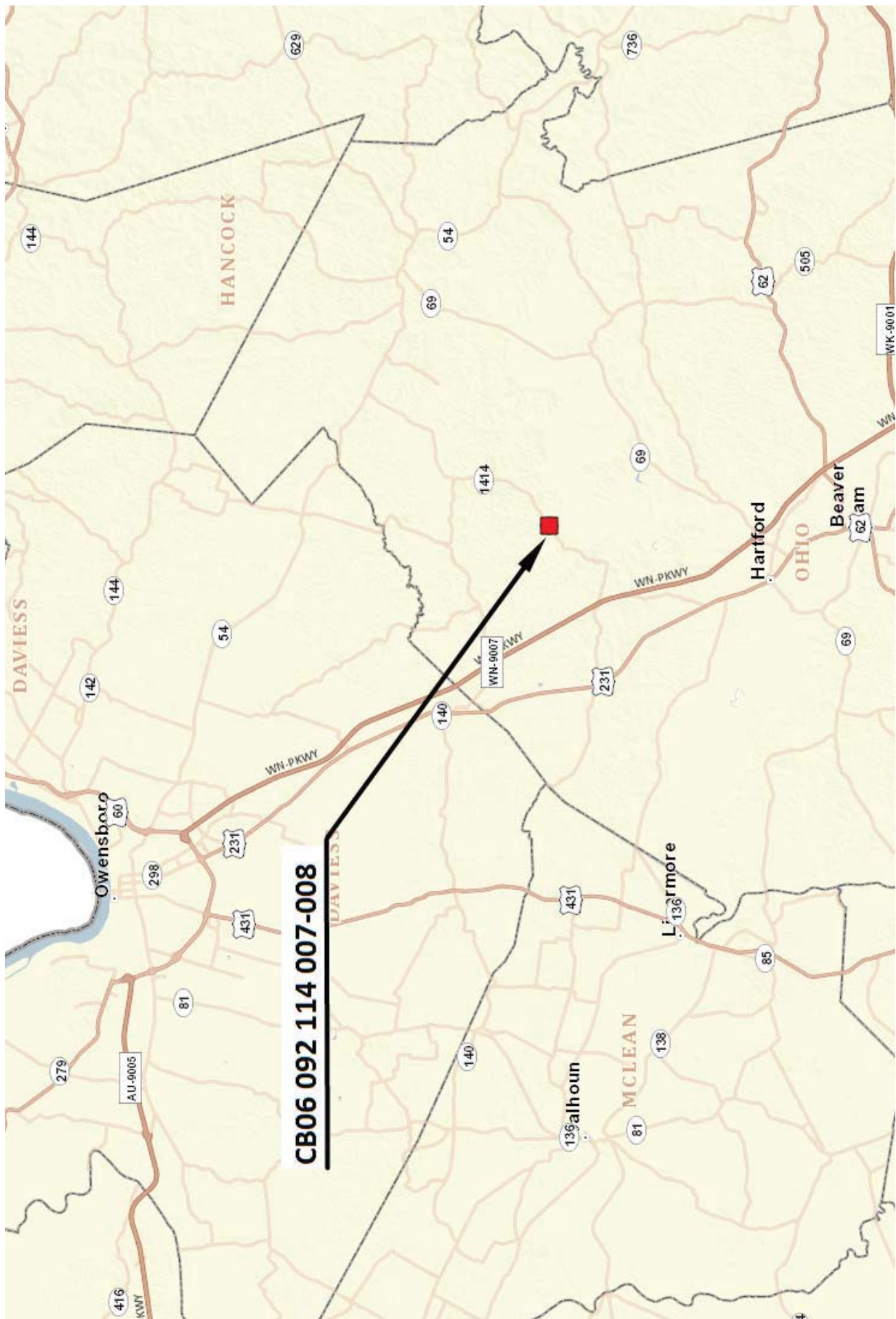
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MATERIAL SUMMARY

CONTRACT ID: 162151

092GR16P026-CB06

MP09205051601

OAK GROVE-BAIZETOWN ROAD (KY 505) FROM 100 FEET SOUTH OF INDIAN CAMP CREEK EXTENDING NORTH TO 100 FEET NORTH OF INDIAN CAMP CREEK CULVERT REPLACEMENT, A DISTANCE OF .04 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	25.00	TON
0010	00190	LEVELING & WEDGING PG64-22	5.00	TON
0015	00212	CL2 ASPH BASE 1.00D PG64-22	25.00	TON
0020	00301	CL2 ASPH SURF 0.38D PG64-22	30.00	TON
0025	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	8.00	EACH
0030	02014	BARRICADE-TYPE III	6.00	EACH
0035	02353	INSTALL GUARDRAIL-STEEL W BM-S FACE	350.00	LF
0040	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0045	02371	GUARDRAIL END TREATMENT TYPE 7	3.00	EACH
0050	02484	CHANNEL LINING CLASS III	20.00	TON
0055	02562	TEMPORARY SIGNS	150.00	SQFT
0060	02650	MAINTAIN & CONTROL TRAFFIC - SITE 1 KY 505 004-005	1.00	LS
0065	02676	MOBILIZATION FOR MILL & TEXT - SITE 1 - KY 505 004-005	1.00	LS
0070	02677	ASPHALT PAVE MILLING & TEXTURING	15.00	TON
0075	02726	STAKING - SITE 1 - KY 505 004-005	1.00	LS
0080	06510	PAVE STRIPING-TEMP PAINT-4 IN	200.00	LF
0085	06514	PAVE STRIPING-PERM PAINT-4 IN	200.00	LF
0090	08003	FOUNDATION PREPARATION - SITE 1 KY 505 004-005	1.00	LS
0095	20257NC	SITE PREPARATION - SITE 1 KY 505 004-005	1.00	LS
0100	20694EN	ALUMINUM STRUCTURAL PLATE BOX CULVERT - 16'-2"X5'-1"	27.00	LF
0105	20695EN	STEEL STRUCTURAL PLATE BOX CULVERT - 16'-2"X5'-1"	27.00	LF
0110	21415ND	EROSION CONTROL - SITE 1 - KY 505 004-005	1.00	LS
0115	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 162151

092GR16P026-CB06

MP09214141601

TAFFY-ADABURG ROAD (KY 1414) FROM 0.680 MILES EAST OF US 231 EXTENDING EAST TO 0.11 MILES WEST OF BREY LANE CULVERT REPLACEMENT, A DISTANCE OF .05 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	5.00	TON
0010	00190	LEVELING & WEDGING PG64-22	5.00	TON
0015	00212	CL2 ASPH BASE 1.00D PG64-22	25.00	TON
0020	00301	CL2 ASPH SURF 0.38D PG64-22	30.00	TON
0025	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	8.00	EACH
0030	02014	BARRICADE-TYPE III	6.00	EACH
0035	02353	INSTALL GUARDRAIL-STEEL W BM-S FACE	400.00	LF
0040	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0045	02371	GUARDRAIL END TREATMENT TYPE 7	3.00	EACH
0050	02562	TEMPORARY SIGNS	150.00	SQFT
0055	02650	MAINTAIN & CONTROL TRAFFIC - SITE 2 KY 1414 000-001	1.00	LS
0060	02676	MOBILIZATION FOR MILL & TEXT - SITE 2 - KY 1414 000-001	1.00	LS
0065	02677	ASPHALT PAVE MILLING & TEXTURING	15.00	TON
0070	02726	STAKING - SITE 2 - KY 1414 000-001	1.00	LS
0075	06510	PAVE STRIPING-TEMP PAINT-4 IN	200.00	LF
0080	06514	PAVE STRIPING-PERM PAINT-4 IN	200.00	LF
0085	08003	FOUNDATION PREPARATION - SITE 2 KY 1414 000-001	1.00	LS
0090	20257NC	SITE PREPARATION - SITE 2 KY 1414 000-001	1.00	LS
0095	20694EN	ALUMINUM STRUCTURAL PLATE BOX CULVERT - 11'-4"X5'-0"	32.00	LF
0100	20695EN	STEEL STRUCTURAL PLATE BOX CULVERT - 11'-4"X5'-0"	32.00	LF
0105	21415ND	EROSION CONTROL - SITE 2 - KY 1414 000-001	1.00	LS
0110	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 162151

092GR16P026-CB06

MP09214141602

TAFFY-ADABURG ROAD (KY 1414) FROM 2.4 MILES EAST OF US 231 EXTENDING EAST TO 0.36 MILES WEST OF KY 1737 CULVERT REPLACEMENT, A DISTANCE OF .05 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	25.00	TON
0010	00190	LEVELING & WEDGING PG64-22	5.00	TON
0015	00212	CL2 ASPH BASE 1.00D PG64-22	25.00	TON
0020	00301	CL2 ASPH SURF 0.38D PG64-22	30.00	TON
0025	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	8.00	EACH
0030	02014	BARRICADE-TYPE III	6.00	EACH
0035	02353	INSTALL GUARDRAIL-STEEL W BM-S FACE	400.00	LF
0040	02371	GUARDRAIL END TREATMENT TYPE 7	4.00	EACH
0045	02484	CHANNEL LINING CLASS III	20.00	TON
0050	02484	CHANNEL LINING CLASS III	20.00	TON
0055	02562	TEMPORARY SIGNS	150.00	SQFT
0060	02650	MAINTAIN & CONTROL TRAFFIC - SITE 3 KY 1414 002-003	1.00	LS
0065	02676	MOBILIZATION FOR MILL & TEXT - SITE 3 - KY 1414 002-003	1.00	LS
0070	02677	ASPHALT PAVE MILLING & TEXTURING	30.00	TON
0075	02726	STAKING - SITE 2 - KY 1414 002-003	1.00	LS
0080	06510	PAVE STRIPING-TEMP PAINT-4 IN	200.00	LF
0085	06514	PAVE STRIPING-PERM PAINT-4 IN	200.00	LF
0090	08003	FOUNDATION PREPARATION - SITE 3 KY 1414 002-003	1.00	LS
0095	20257NC	SITE PREPARATION - SITE 3 KY 1414 002-003	1.00	LS
0100	20694EN	ALUMINUM STRUCTURAL PLATE BOX CULVERT - 16'-2"X5'-1"	32.00	LF
0105	20695EN	STEEL STRUCTURAL PLATE BOX CULVERT - 16'-2"X5'-1"	32.00	LF
0110	21415ND	EROSION CONTROL - SITE 3 - KY 1414 002-003	1.00	LS
0115	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 162151

092GR16P026-CB06

MP09214141603

TAFFY-ADABURG ROAD (KY 1414) FROM 7.04 MILES EAST OF US 231 EXTENDING EAST TO 9710FEET WEST OF BUNCH LANE CULVERT REPLACEMENT, A DISTANCE OF .05 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	25.00	TON
0010	00190	LEVELING & WEDGING PG64-22	5.00	TON
0015	00212	CL2 ASPH BASE 1.00D PG64-22	25.00	TON
0020	00301	CL2 ASPH SURF 0.38D PG64-22	30.00	TON
0025	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	4.00	EACH
0030	02014	BARRICADE-TYPE III	6.00	EACH
0035	02353	INSTALL GUARDRAIL-STEEL W BM-S FACE	200.00	LF
0040	02371	GUARDRAIL END TREATMENT TYPE 7	2.00	EACH
0045	02484	CHANNEL LINING CLASS III	20.00	TON
0050	02562	TEMPORARY SIGNS	150.00	SQFT
0055	02650	MAINTAIN & CONTROL TRAFFIC - SITE 4 KY 1414 007-008	1.00	LS
0060	02676	MOBILIZATION FOR MILL & TEXT - SITE 4 - KY 1414 007-008	1.00	LS
0065	02677	ASPHALT PAVE MILLING & TEXTURING	30.00	TON
0070	02726	STAKING - SITE 4 - KY 1414 007-008	1.00	LS
0075	06510	PAVE STRIPING-TEMP PAINT-4 IN	200.00	LF
0080	06514	PAVE STRIPING-PERM PAINT-4 IN	200.00	LF
0085	20257NC	SITE PREPARATION - SITE 4 KY 1414 007-008	1.00	LS
0090	21415ND	EROSION CONTROL - SITE 4 - KY 1414 007-008	1.00	LS
0095	22533EN	ALUMINUM ALLOY STRUCT PLATE PIPE ARCH - 114" EQUIVALENT	41.00	LF
0100	22534EN	STEEL STRUCTURAL PLATE PIPE ARCH - 114" EQUIVALENT	41.00	LF
0105	24575ES610	HEADWALL - REINFORCED CONCRETE - 114" EQUIVALENT PIPE CULVERT WITH PAVING AND APRONS	2.00	EACH
0110	02569	DEMOBILIZATION	1.00	LS

GUARDRAIL SUMMARY

092GR16P026-CB06

KY 505

Milepoint 4.1

NB 200 LF & 2-Type 7 End Treatments

SB 150 LF & 1-Type 7 End Treatment & 1 Radius with Terminal Section No.1

KY 1414

Milepoint 0.7

EB 200 LF & 1-Radius with Terminal Section No. 1 & 1-Type 7 End Treatment

WB 200 LF & 2-Type 7 End Treatments

Milepoint 2.45

EB 200 LF & 2-Type 7 End Treatments

WB 200 LF & 2-Type 7 End Treatments

MILEPOINT 7.03

EB 200 LF & 2 Type 7 End Treatments

MILLING SUMMARY

092GR16P026-CB06

After the Engineer determines that the asphalt base placed over the culvert trench has sufficiently stabilized, mill 1 inch overall as follows:

KY505

Milepoint 4.2

100 feet before and after culvert centerline

KY1414

Milepoint 0.7

100 feet before and after culvert centerline

Milepoint 2.45

100 feet before and after culvert centerline

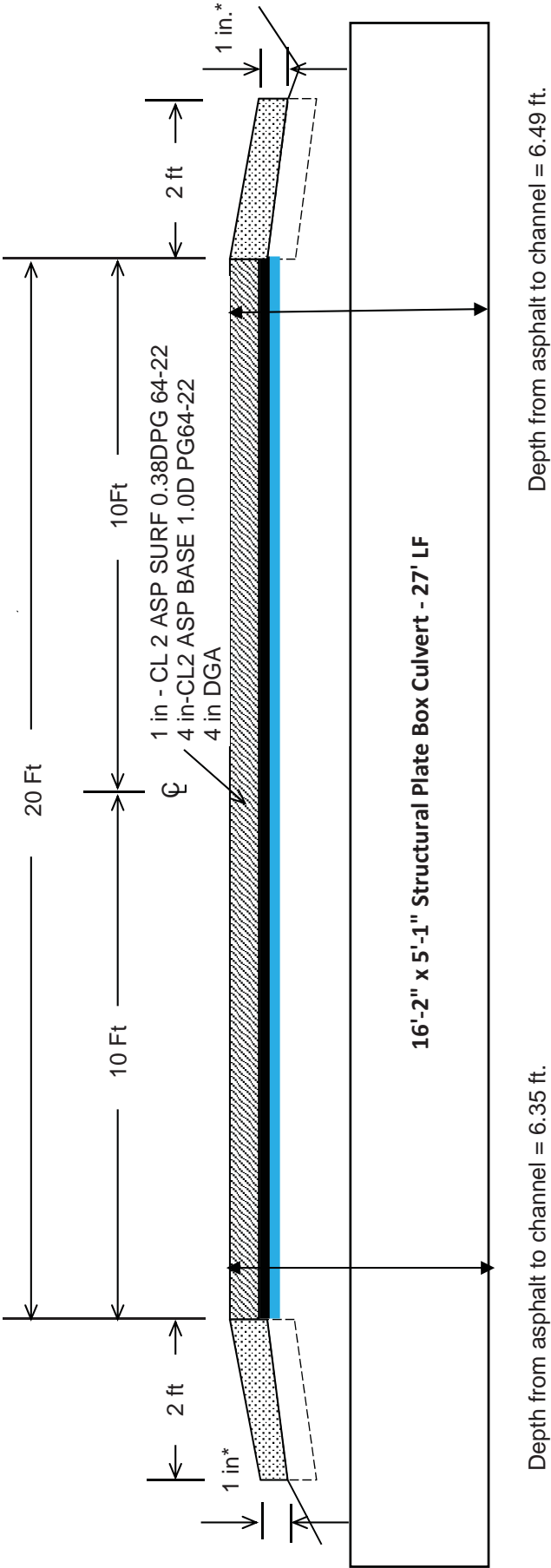
Milepoint 7.03

100 feet before and after culvert centerline

DITCHING SUMMARY
092GR16P026-CB06

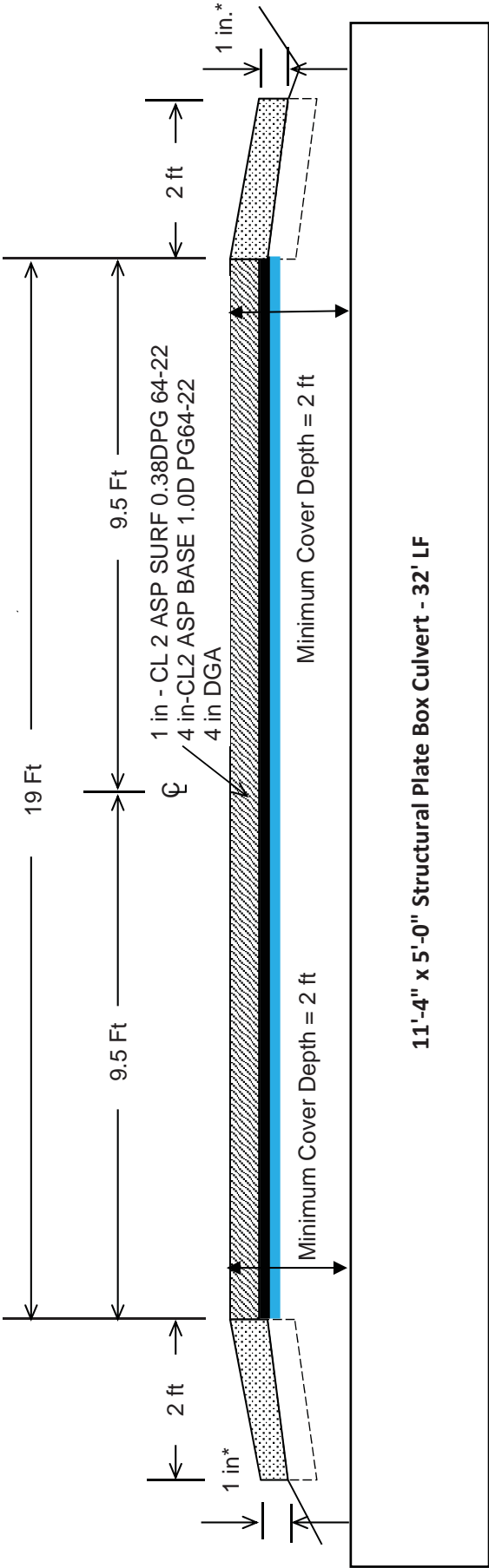
KY 1414 – Milepoint 0.7 – 300 LF (Incidental to Site Preparation)

SITE 1
CB06 092 0505 004-005
TYPICAL SECTION



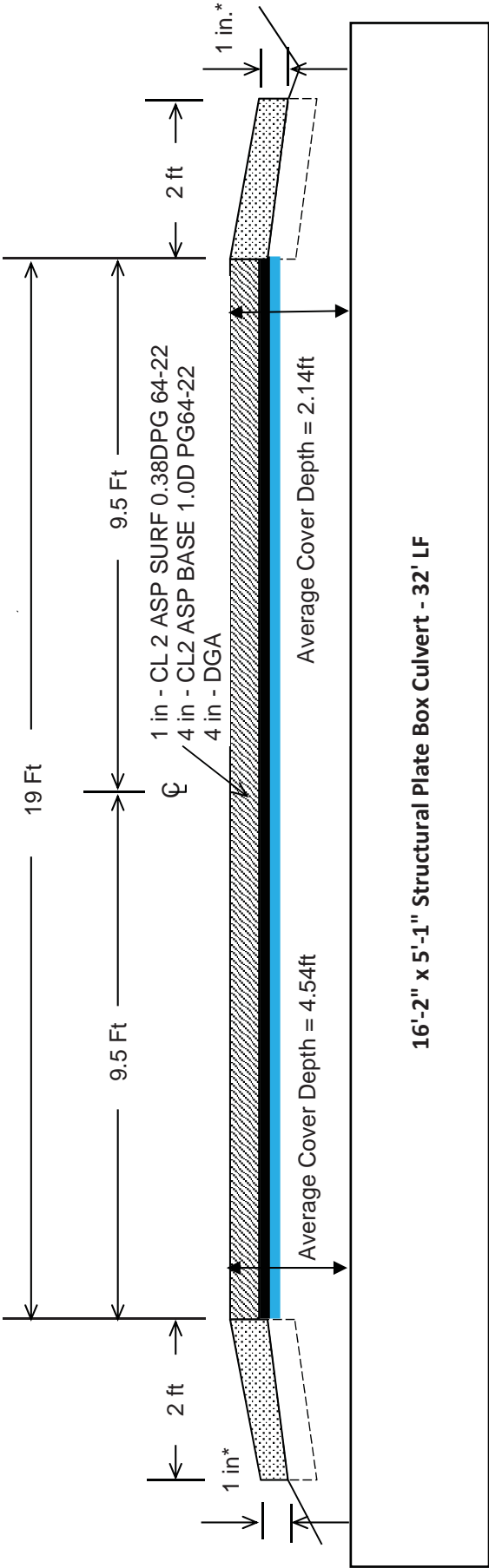
***1 Inch Maximum Drop-Off Where Existing Site Conditions Permit**

SITE 2
CB06 092 1414 000-001
TYPICAL SECTION



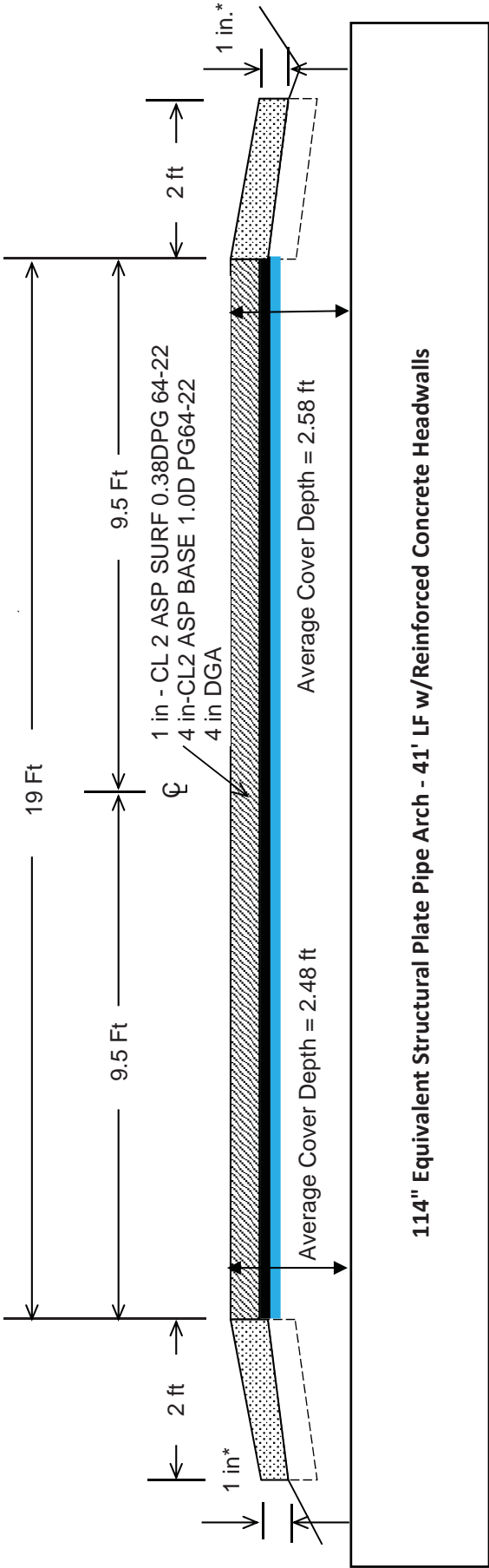
*1" Maximum Drop-Off Where Existing Site Conditions Permit

SITE 3
CB06 092 1414 002-003
TYPICAL SECTION



*1" Maximum Drop-Off Where Existing Site Conditions Permit

SITE 4
CB06 092 1414 007-008
TYPICAL SECTION



*1" Maximum Drop-Off Where Existing Site Conditions Permit

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2012* and *Standard Drawings, Edition of 2012 with the 2012 Revision*.

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Subsection:	101.03 DEFINITIONS
Revision:	<p>Add the following Definitions to this section:</p> <p>Superpave Mix Design Technologist (SMDT) - An inspector qualified by the KYTC to submit, adjust, or approve asphalt mix designs.</p> <p>Superpave Plant Technologist (SPT) - An inspector qualified by the KYTC to perform routine inspection and process control, acceptance, or verification testing on asphalt mixtures.</p>
Subsection:	102.15 Process Agent.
Revision:	<p>Replace the 1st paragraph with the following:</p> <p>Every corporation doing business with the Department shall submit evidence of compliance with KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and 271B.16-220, and file with the Department the name and address of the process agent upon whom process may be served.</p>
Subsection:	105.13 Claims Resolution Process.
Revision:	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no longer available through the forms library and are forms generated within the AASHTO SiteManager software.
Subsection:	108.01 Subcontracting of Contract.
Revision:	<p>Replace the section with the following:</p> <p>Do not subcontract, sell, transfer, assign, or otherwise dispose of the Contract or any portion of the Contract or Contracts, or of the right, title, or interest therein, without the Engineer's written consent. If the Contractor chooses to subcontract any portion of the Contract, a written request to sublet work must be submitted on the Subcontract Request (TC 63-35) form for the Engineer's approval. When directed by the Engineer, submit a certified copy of the actual subcontract agreement executed between the parties.</p> <p>The Engineer will allow the Contractor to subcontract a portion, but the Contractor must perform with his own organization work amounting to no less than 30 percent of the total Contract cost. The Engineer will not allow any subcontractor to exceed the percentage to be performed by the Contractor and will require the Contractor to maintain a supervisory role over the entire project.</p> <p>Do not allow any subcontractor to further subcontract any portion of the work without obtaining written consent from the Engineer. When the Engineer gives such consent, the first tier subcontractor may further subcontract a portion of his work not to exceed 50 percent of the work originally subcontracted to him by the Contractor. Do not allow any second tier subcontractor to subcontract any portion of the work.</p> <p>Extra work performed by subcontractors in accordance with Section 109 will not be utilized in the computation of total dollar amount subcontracted. Subcontract percentages are based upon the original contract amount.</p> <p>Payment to subcontractors for satisfactory performance of their work or materials supplied must be made within 7 calendar days from receipt of payment from the Engineer. Upon request by the Engineer, provide proof that payment has been made to the subcontractor within the 7 calendar days. Progress payments may be withheld for failure to comply with this request</p>

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	<p>The Engineer's written consent to subcontract, assign, or otherwise dispose of any portion of the Contract does not, under any circumstances, relieve the Contractor or the surety of their respective liabilities and obligations under the Contract. The Engineer will make transactions only with the Contractor. The Engineer will recognize subcontractors only in the similar capacity of employees or workers of the Contractor who are subject to the same requirements as to character and competence as specified in Subsection 108.06.</p> <p>Lease agreements are acceptable on Department projects. No additional paperwork is needed when equipment is rented from a commercial rental company unless the leased equipment comes with an operator. In these circumstances, payroll records for the operator of the leased equipment must be maintained and submitted by the contractor in accordance with Department policy.</p> <p>Lease agreements between contractors that involve equipment only will require the submittal of a TC 63-71 Department Equipment Rental Form. If a Contractor is found to be in violation of these requirements, the Engineer reserves the right to withhold payment for the work which was performed in violation of these requirements. This provision does not include the lease or use of equipment from a corporation or company wholly owned by the Contractor. The Contractor shall not use equipment in the performance of the Contract to which title is not held by the Contractor or an approved subcontractor without a submitted lease agreement.</p> <p>If a public official has provided a documented Declaration of Emergency, then the Engineer may verbally waive the requirement of submitting a TC 63-71 Department Equipment Rental Form until the situation has ended. After the emergency situation ends, immediately remove the equipment from the project or submit a completed TC 63-71 Department Equipment Rental Form to the Engineer.</p>
Subsection:	108.03 Preconstruction Conference.
Revision:	<p>Replace 8) Staking with the following:</p> <p>8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.</p>
Subsection:	109.07.02 Fuel.
Revision:	<p>Revise item Crushed Aggregate Used for Embankment Stabilization to the following:</p> <p style="padding-left: 40px;">Crushed Aggregate Used for Stabilization of Unsuitable Materials Used for Embankment Stabilization</p> <p>Delete the following item from the table.</p> <p>Crushed Sandstone Base (Cement Treated)</p>
Subsection:	110.02 Demobilization.
Revision:	<p>Replace the first part of the first sentence of the second paragraph with the following:</p> <p>Perform all work and operations necessary to accomplish final clean-up as specified in the first paragraph of Subsection 105.12;</p>
Subsection:	112.03.12 Project Traffic Coordinator (PTC).
Revision:	<p>Replace the last paragraph of this subsection with the following:</p> <p>Ensure the designated PTC has sufficient skill and experience to properly perform the task assigned and has successfully completed the qualification courses.</p>

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Subsection:	112.04.18 Diversions (By-Pass Detours).
Revision:	Insert the following sentence after the 2nd sentence of this subsection. The Department will not measure temporary drainage structures for payment when the contract documents provide the required drainage opening that must be maintained with the diversion. The temporary drainage structures shall be incidental to the construction of the diversion. If the contract documents fail to provide the required drainage opening needed for the diversion, the cost of the temporary drainage structure will be handled as extra work in accordance with section 109.04.
Subsection:	201.03.01 Contractor Staking.
Revision:	Replace the first paragraph with the following: Perform all necessary surveying under the general supervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.
Subsection:	201.04.01 Contractor Staking.
Revision:	Replace the last sentence of the paragraph with the following: Complete the general layout of the project under the supervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.
Subsection:	206.04.01 Embankment-in-Place.
Revision:	Replace the fourth paragraph with the following: The Department will not measure suitable excavation included in the original plans that is disposed of for payment and will consider it incidental to Embankment-in-Place.
Subsection:	208.02.01 Cement.
Revision:	Replace paragraph with the following: Select Type I or Type II cement conforming to Section 801. Use the same type cement throughout the work.
Subsection:	208.03.06 Curing and Protection.
Revision:	Replace the fourth paragraph with the following: Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day consists of a continuous 24-hour period in which the ambient air temperature does not fall below 40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7) , 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department may allow a shortened curing period when the Contractor requests. The Contractor shall give the Department at least 3 day notice of the request for a shortened curing period. The Department will require a minimum of 3 curing days after final compaction. The Contractor shall furnish cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened curing time is requested. The Department will test cores using an unconfined compression test. Roadbed cores must achieve a minimum strength requirement of 80 psi.
Subsection:	208.03.06 Curing and Protection.
Revision:	Replace paragraph eight with the following: At no expense to the Department, repair any damage to the subgrade caused by freezing.

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Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Revision:	Revise Seed Mix Type I to the mixture shown below: 50% Kentucky 31 Tall Fescue (<i>Festuca arundinacea</i>) 35% Hard Fescue (<i>Festuca (Festuca longifolia)</i>) 10% Ryegrass, Perennial (<i>Lolium perenne</i>) 5% White Dutch Clover (<i>Trifolium repens</i>)
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	2)
Revision:	Replace the paragraph with the following: Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course replace the crown vetch with Kentucky 31 Tall Fescue.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	3)
Revision:	Replace the paragraph with the following: Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12. Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to crop land or golf course, replace the <i>Sericea Lespedeza</i> with Kentucky 31 Fescue.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
Revision:	Delete the first sentence of the section.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
Revision:	Replace the second and third sentence of the section with the following: Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural limestone to the seedbed when the Engineer determines it is needed. When required, place agricultural limestone at a rate of 3 tons per acre.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	D) Top Dressing.
Revision:	Change the title of part to D) Fertilizer.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
Revision:	Replace the first paragraph with the following: Apply fertilizer at the beginning of the seeding operation and after vegetation is established. Use fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to the seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-10 fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000 square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional cost to the Department. Re-establish any vegetation severely damaged or destroyed because of an excessive application of fertilizer at no cost to the Department.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
Revision:	Delete the second paragraph.

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Subsection:	212.04.04 Agricultural Limestone.		
Revision:	Replace the entire section with the following: The Department will measure the quantity of agricultural limestone in tons.		
Subsection:	212.04.05 Fertilizer.		
Revision:	Replace the entire section with the following: The Department will measure fertilizer used in the seeding or sodding operations for payment. The Department will measure the quantity by tons.		
Subsection:	212.05 PAYMENT.		
Revision:	Delete the following item code:		
	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
	05966	Topdressing Fertilizer	Ton
Subsection:	212.05 PAYMENT.		
Revision:	Add the following pay items:		
	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
	05963	Initial Fertilizer	Ton
	05964	20-10-10 Fertilizer	Ton
	05992	Agricultural Limestone	Ton
Subsection:	213.03.02 Progress Requirements.		
Revision:	<p>Replace the third paragraph with the following: After exposing areas of erodible material, make every effort to stabilize and protect the areas as quickly as possible. Permanently seed and mulch all areas at final grade within 14 days. Temporary stabilization practices on those portions of the project where construction activities have temporarily ceased shall be initiated within 14 days of the date of activity cessation. The Engineer will suspend grading operations for instances where the Contractor fails to sustain erosion control measures to effectively control erosion and to prevent water pollution in accordance with the KPDES Permit. In addition, the Engineer will withhold monies due on current estimates until corrective work has been initiated and is continuously progressing to remediate noted deficiencies. Additionally, should noted deficiencies not be adequately addressed to the satisfaction of the Engineer within 7 calendar days of receipt of written notification of deficiencies, the Department will apply a penalty equal to the daily liquidated damages rate until all aspects of the work have been completed.</p>		
Subsection:	213.03.05 Temporary Control Measures.		
Part:	E) Temporary Seeding and Protection.		
Revision:	Delete the second sentence of the first paragraph.		
Subsection:	304.02.01 Physical Properties.		
Table:	Required Geogrid Properties		
Revision:	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.		
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.		
Part:	B) Sampling.		
Revision:	Replace the second sentence with the following: The Department will determine when to obtain the quality control samples using the random-number feature of the mix design submittal and approval spreadsheet. The Department will randomly determine when to obtain the verification samples required in Subsections 402.03.03 and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.		

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Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.
Part:	D) Testing Responsibilities.
Number:	3) VMA.
Revision:	Add the following paragraph below Number 3) VMA: Retain the AV/VMA specimens and one additional corresponding G_{mm} sample for 5 working days for mixture verification testing by the Department. For Specialty Mixtures, retain a mixture sample for 5 working days for mixture verification testing by the Department. When the Department's test results do not verify that the Contractor's quality control test results are within the acceptable tolerances according to Subsection 402.03.03, retain the samples and specimens from the affected subplot(s) for the duration of the project.
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.
Part:	D) Testing Responsibilities.
Number:	4) Density.
Revision:	Replace the second sentence of the Option A paragraph with the following: Perform coring by the end of the following work day.
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.
Part:	D) Testing Responsibilities.
Number:	5) Gradation.
Revision:	Delete the second paragraph.
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.
Part:	H) Unsatisfactory Work.
Number:	1) Based on Lab Data.
Revision:	Replace the second paragraph with the following: When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of acceptability according to Subsection 402.03.05.
Subsection:	402.03.03 Verification.
Revision:	Replace the first paragraph with the following: 402.03.03 Mixture Verification. For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected subplot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment.
Subsection:	402.03.03 Verification.
Part:	A) Evaluation of Subplot(s) Verified by Department.
Revision:	Replace the third sentence of the second paragraph with the following: When the paired t -test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.

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Subsection:	402.03.03 Verification.
Part:	B) Evaluation of Sublots Not Verified by Department.
Revision:	Replace the third sentence of the first paragraph with the following: When differences between test results are not within the tolerances listed below, the Department will resolve the discrepancy according to Subsection 402.03.05.
Subsection:	402.03.03 Verification.
Part:	B) Evaluation of Sublots Not Verified by Department.
Revision:	Replace the third sentence of the second paragraph with the following: When the <i>F</i> -test or <i>t</i> -test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.
Subsection:	402.03.03 Verification.
Part:	C) Test Data Patterns.
Revision:	Replace the second sentence with the following: When patterns indicate substantial differences between the verified and non-verified sublots, the Department will perform further comparative testing according to subsection 402.03.05.
Subsection:	402.03 CONSTRUCTION.
Revision:	Add the following subsection: 402.03.04 Testing Equipment and Technician Verification. For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the Department will obtain an additional verification sample at random using the Asphalt Mixture Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and Department's laboratory testing equipment and technicians. The Department will obtain a mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split it according to AASHTO R 47. The Department will retain one split portion of the sample and provide the other portion to the Contractor. At a later time convenient to both parties, the Department and Contractor will simultaneously reheat the sample to the specified compaction temperature and test the mixture for AV and VMA using separate laboratory equipment according to the corresponding procedures given in Subsection 402.03.02. The Department will evaluate the differences in test results between the two laboratories. When the difference between the results for AV or VMA is not within ± 2.0 percent, the Department will investigate and resolve the discrepancy according to Subsection 402.03.05.
Subsection:	402.03.04 Dispute Resolution.
Revision:	Change the subsection number to 402.03.05.
Subsection:	402.05 PAYMENT.
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures
Table:	AC
Revision:	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ± 0.6 .
Subsection:	403.01 Description.
Revision:	Replace the sentence three and four of the first paragraph with the following: Provide a Superpave Plant Technologist (SPT) or Superpave Mix Design Technician (SMDT) qualified by the Laboratories' Quality Acceptance program. Be available to address all Quality Control concerns arising during work performed under section 403.
Subsection:	403.02.10 Material Transfer Vehicle (MTV).
Revision:	Replace the first sentence with the following: In addition to the equipment specified above, provide a MTV with the following minimum characteristics:

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Subsection:	403.03.03 Preparation of Mixture
Part:	C) Mix Design Criteria
Number:	2)
Revision:	Revise part 2) to read as follows: Selection of Optimum AC. Normally, the Department will approve the AC at an air-void content of 4.0 percent. The Engineer may assign an AC corresponding to other air-void levels as deemed appropriate. Ensure the optimum AC is a minimum of 5.2 percent by weight of the total mixture for all 0.5-inch nominal surface mixtures and 5.5 percent by weight of the total mixture for all 0.38-inch nominal surface mixtures.
Subsection:	412.02.09 Material Transfer Vehicle (MTV).
Revision:	Replace the paragraph with the following: Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.
Subsection:	412.03.07 Placement and Compaction.
Revision:	Replace the first paragraph with the following: Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on ramps and/or shoulders unless specified in the contract. When the Engineer determines the use of the MTV is not practical for a portion of the project, the Engineer may waive its requirement for that portion of pavement by a letter documenting the waiver.
Subsection:	412.04 MEASUREMENT.
Revision:	Add the following subsection: 412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for payment and will consider its use incidental to the asphalt mixture.
Subsection:	501.03.19 Surface Tolerances and Testing Surface.
Part:	B) Ride Quality.
Revision:	Add the following to the end of the first paragraph: The Department will specify if the ride quality requirements are Category A or Category B when ride quality is specified in the Contract. Category B ride quality requirements shall apply when the Department fails to classify which ride quality requirement will apply to the Contract.
Subsection:	501.03.05 Weather Limitations and Protection.
Revision:	Replace the reference to Subsection 501.03.19 in Paragraph 5, with Subsection 501.03.20.
Subsection:	601.02.02 Cement
Revision:	Replace the third sentence with the following: The Department will allow the use of Type IP(≤ 20), Type IS(≤ 30), Type IL, Type II, and Type III when the Engineer approves.
Subsection:	601.02.02 Cement
Revision:	Replace the fifth sentence with the following: If unsatisfactory test results are obtained using Type IP(≤ 20), Type IS(≤ 30), Type IL, Type II, or Type III cement complete the work using Type I cement.

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Subsection:	601.03.02 Concrete Producer Responsibilities.																																																																																										
Part:	E) Trip Tickets.																																																																																										
Revision:	Replace the section with the following: Furnish a trip ticket containing the minimum information shown in the table below. Certify that the data on the ticket is correct and that the mixture conforms to the approved mix design. Ensure that the plant manager or a Level II concrete technician signs the ticket. The Department's jobsite inspector will complete all other necessary information on the back of the trip ticket.																																																																																										
	<table><tr><td>Contract Id:</td><td>Proj. Number:</td><td>Date:</td><td>County:</td><td></td></tr><tr><td>Truck No:</td><td>Producer Name:</td><td colspan="3">SiteManager Sample Id:</td></tr><tr><td>Qty(Yds³):</td><td colspan="2">Time Loaded (Non Agitated Concrete Only):</td><td colspan="2"></td></tr><tr><td colspan="5">Begin Mixing Time: _____ AM _____ PM _____ REV _____</td></tr><tr><td colspan="2">Set Retarder Used</td><td>Yes _____</td><td>Type _____</td><td>No _____</td></tr><tr><td colspan="2">Water Reducer Used</td><td>Yes _____</td><td>Type _____</td><td>No _____</td></tr><tr><td colspan="2">Water Underrun _____ Gal/Yd³</td><td colspan="3">Total Gallons _____</td></tr><tr><td>Design W/C:</td><td>Actual W/C:</td><td>Slump (inches)</td><td colspan="2"></td></tr><tr><td colspan="5">Batch Weight Information:</td></tr><tr><td><u>Material:</u></td><td><u>Description:</u></td><td><u>Design Qty:</u></td><td><u>Required:</u></td><td><u>Batched:</u></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="5">Remarks:</td></tr><tr><td colspan="5"></td></tr><tr><td colspan="5"></td></tr><tr><td colspan="5">*The data on this ticket is correct for the approved concrete mix design.*</td></tr><tr><td colspan="2">Signature: _____</td><td colspan="3">Date: _____</td></tr><tr><td colspan="5">KRMCA Level II Technician or Plant Manager</td></tr></table>	Contract Id:	Proj. Number:	Date:	County:		Truck No:	Producer Name:	SiteManager Sample Id:			Qty(Yds ³):	Time Loaded (Non Agitated Concrete Only):				Begin Mixing Time: _____ AM _____ PM _____ REV _____					Set Retarder Used		Yes _____	Type _____	No _____	Water Reducer Used		Yes _____	Type _____	No _____	Water Underrun _____ Gal/Yd ³		Total Gallons _____			Design W/C:	Actual W/C:	Slump (inches)			Batch Weight Information:					<u>Material:</u>	<u>Description:</u>	<u>Design Qty:</u>	<u>Required:</u>	<u>Batched:</u>											Remarks:															*The data on this ticket is correct for the approved concrete mix design.*					Signature: _____		Date: _____			KRMCA Level II Technician or Plant Manager				
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Subsection:	601.03.03 Proportioning and Requirements																																																																																										
Part:	A) Concrete																																																																																										
Revision:	Revise Table for INGREDIENT PROPORTIONS AND REQUIREMENTS FOR VARIOUS CLASSES OF CONCRETE as follows: Replace "M1 w/ Type 1 cement" with "M1 w/ Type 1 or blended hydraulic cement"																																																																																										
Subsection:	601.03.03 Proportioning and Requirements																																																																																										
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures																																																																																										
Revision:	Revise part C) header to read as follows: Mixtures Using Type IP(≤20), IS(≤30), and IL Cement and Mineral Admixtures.																																																																																										
Subsection:	601.03.03 Proportioning and Requirements																																																																																										
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Number:	1)																																																																																										
Revision:	Revise first sentence to read as follows: Type IP(≤20), IS(≤30), IL Cement.																																																																																										
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Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures																																																																																										
Number:	2)																																																																																										
Revision:	Revise second sentence to read as follows: The use of fly ash, blast furnace slag cement, or micosilica in concrete is the Contractor's option.																																																																																										

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Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Revision:	Revise the first sentence in the second paragraph to read as follows: When the ability to use blast furnace slag cement or microsilica has not been demonstrated have the concrete producer provide trial batches in accordance with Subsection 601.03.02 G) 1).
Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Part:	b)
Revision:	Revise first sentence to read as follows: Blast Furnace Slag Cement
Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Part:	b)
Revision:	Revise second sentence to read as follows: When added as a separate ingredient, use Grade 120 or Grade 100 slag to reduce the quantity of cement, except do not use blast furnace slag cement to reduce the quantity of Type IS(≤30) cement.
Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Part:	b)
Revision:	In part b), replace all references to "GGBF slag" with "blast furnace slag cement".
Subsection:	601.03.04 Classes and Primary Uses
Part:	H) Class M1
Revision:	Revise part H) to read as follows: High early strength for bridge joint repair and full or partial depth bridge deck patching. (Type 1 cement or blended hydraulic cement)
Subsection:	603.03.06 Cofferdams.
Revision:	Replace the seventh sentence of paragraph one with the following: Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.
Subsection:	605.03.04 Tack Welding.
Revision:	Insert the subsection and the following: 605.03.04 Tack Welding. The Department does not allow tack welding.
Subsection:	606.03.17 Special Requirements for Latex Concrete Overlays.
Part:	A) Existing Bridges and New Structures.
Number:	1) Prewetting and Grout-Bond Coat.
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge decks prepared by hydrodemolition.
Subsection:	609.03 Construction.
Revision:	Replace Subsection 609.03.01 with the following: 609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast concrete release the temporary erection supports under the bridge and swing the span free on its supports. 609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the beam is placed in the final location and prior to placing steel reinforcement. At locations where lift loops are cut, paint the top of the beam with galvanized or epoxy paint.

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Subsection:	611.03.02 Precast Unit Construction.
Revision:	Replace the first sentence of the subsection with the following: Construct units according to ASTM C1577, replacing Table 1 (Design Requirements for Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions) with KY Table 1 (Precast Culvert KYHL-93 Design Table) , and Section 605 with the following exceptions and additions:
Subsection:	613.03.01 Design.
Number:	2)
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD Bridge Design Specifications"
Subsection:	615.06.02
Revision:	Add the following sentence to the end of the subsection. The ends of units shall be normal to walls and centerline except exposed edges shall be beveled $\frac{3}{4}$ inch.
Subsection:	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.
Revision:	Replace the reference of 6.6 in the section to 615.06.06.
Subsection:	615.06.04 Placement of Reinforcement for Precast Endwalls.
Revision:	Replace the reference of 6.7 in the section to 615.06.07.
Subsection:	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.
Revision:	Replace the subsection with the following: Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be not more than 16 inches.
Subsection:	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.
Revision:	Replace the subsection with the following: Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012 Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.

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Subsection:	615.08.01 Type of Test Specimen.
Revision:	Replace the subsection with the following: Start-up slump, air content, unit weight, and temperature tests will be performed each day on the first batch of concrete. Acceptable start-up results are required for production of the first unit. After the first unit has been established, random acceptance testing is performed daily for each 50 yd ³ (or fraction thereof). In addition to the slump, air content, unit weight, and temperature tests, a minimum of one set of cylinders shall be required each time plastic property testing is performed.
Subsection:	615.08.02 Compression Testing.
Revision:	Delete the second sentence.
Subsection:	615.08.04 Acceptability of Core Tests.
Revision:	Delete the entire subsection.
Subsection:	615.12 Inspection.
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the "Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the production facility. Units shall be inspected upon arrival for any evidence of damage resulting from transport to the jobsite.
Subsection:	701.04.16 Deduction for Pipe Deflection.
Revision:	Insert the following at the end of the paragraph: The section length is determined by the length of the pipe between joints where the failure occurred.
Subsection:	716.02.02 Paint.
Revision:	Replace sentence with the following: Conform to Section 821.
Subsection:	716.03 CONSTRUCTION.
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims,
Subsection:	716.03.02 Lighting Standard Installation.
Revision:	Replace the paragraph with the following: Locate poles to avoid trees, drainage, structures, etc. Regardless of the station & offset noted, locate all poles/bases behind guardrail a minimum of 4 feet behind the face of the guardrail. All poles shall be placed as close to stations and offsets as stated on Plans to provide proper illumination. If any pole needs to be relocated from stations indicated, the Division of Traffic Operations shall be contacted. When submitting brochures for suggested luminaires include iso lux curves, IES type distribution, lamp lumens, and typical ballast factor used for each type of luminaire. Submit the photometric data in a digital IES format to the Division of Traffic Operations. Include with the submittal a point of contact and phone number to answer technical questions about the luminaire.
Subsection:	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Revision:	Replace the third sentence with the following: Orient the transformer base so the door is positioned on the side away from on-coming traffic.
Subsection:	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Number:	1) Breakaway Installation and Requirements.
Revision:	Replace the first sentence with the following: For breakaway supports, conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.

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Subsection: 716.03.02 Lighting Standard Installation.
Part: B) High Mast Installation
Revision: Replace the first three sentences of the first paragraph with the following: Install each high mast pole as noted on Plans. Install each high mast pole on a separate circuit and use luminaires with light patterns as indicated. Orient luminaires as shown in Plans.

Subsection: 716.03.02 Lighting Standard Installation.
Part: B) High Mast Installation
Number: 2) Concrete Base Installation
Revision: Modification of Chart and succeeding paragraphs within this section:

Drilled Shaft Depth Data							
Level Ground		3:1 Ground Slope		2:1 Ground Slope		1.5:1 Ground Slope ⁽²⁾	
Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock
17 ft	7 ft	19 ft	7 ft	20 ft	7 ft	(1)	7 ft
Steel Requirements							
Vertical Bars				Ties or Spiral			
Size	Total	Size	Spacing or Pitch				
#10	16	#4	12 inch				

Note 1: Shaft length is 22 feet for cohesive soil only. For cohesionless soil, contact Geotechnical Branch for design.

Note 2: Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic Operations.

If rock is encountered during drilling operations and confirmed by the Engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the design table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted

If a shorter depth is desired for the drilled shaft, the Contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and one-half closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the Geotechnical Branch if such conditions

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

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Subsection:	716.03.03 Trenching.
Part:	A) Trenching of Conduit for Highmast Ducted Cables.
Revision:	Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.
Subsection:	716.03.03 Trenching.
Part:	B) Trenching of Conduit for Non-Highmast Cables.
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary for either situation listed previously, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes.
Subsection:	716.03.04 Conduit Installation.
Revision:	Replace the first two sentences of the paragraph with the following: Provide rigid steel conduit encasement for all conductors except as specified in the Contract. Provide conduit that is listed on the Department's List of Approved Materials.
Subsection:	716.03.04 Conduit Installation.
Part:	A) Conduit Requirements in Junction Boxes.
Number:	1) Highmast Ducted Cable.
Revision:	Replace the first two sentences with the following: Install conduit horizontally through the junction box. Conduit shall be 4 inches from the bottom and 4 inches from the side of the junction box.
Subsection:	716.03.04 Conduit Installation.
Revision:	Add the following to the Part to the Subsection: G) Bore and Jack. Construction methods shall be in accordance with Subsections 706.03.02, paragraphs 1, 2 and 4.
Subsection:	716.03.08 Splicing.
Revision:	Replace the last sentence of the paragraph with the following: Ensure the splices are of the correct size for the wire being used.
Subsection:	716.03.10 Junction Boxes.
Revision:	Replace subsection title with the following: Electrical Junction Box and replace the last sentence of the paragraph with the following: Any additional junction boxes shall be approved by the Engineer.
Subsection:	716.03.13 Temporary Lighting.
Revision:	Change subsection heading to the following: 716.03.13 Temporary/Maintain Lighting.
Subsection:	716.03.13 Temporary /Maintain Lighting.
Revision:	<p>Replace the entire section with the following:</p> <p>The Contractor shall furnish and install all materials necessary to temporarily light the proposed roadway to design standards in Subsection 716.03. The Contractor shall submit his proposed design of temporary lighting to the Division of Traffic Operations for approval at least 30 days before installation.</p> <p>Maintain all lighting elements impacted within or outside the project limits until new lighting elements are installed and a functional inspection has been performed on the new lighting elements. The Contractor shall submit a proposed design for maintaining lighting to the Division of Traffic Operations for approval at least 30 days before installation.</p>

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Subsection:	716.03.14 Remove Lighting.
Revision:	Replace the section with the following: Remove all lighting equipment that is identified by the Engineer as no longer necessary including, but not limited to, the following: pole bases, poles, junction boxes, cabinets, and wood poles. Pole bases shall be removed a minimum of one foot below finished grade by chipping off or other method that is approved by the Engineer. Dispose of all removed concrete off right-of-way. Wood poles shall be removed a minimum of one foot below finished grade. Backfill holes with material approved by the Engineer. Conduit may be abandoned in the ground. All materials shall be removed from the project as directed by the Engineer. Transformers not owned by a utility shall be tested for PCB's and disposed of in accordance with state regulations.
Subsection:	716.03.15 Painting.
Revision:	Replace the first sentence with the following: Clean non-galvanized or damaged surfaces of exposed junction boxes, pull boxes, control panels, poles, and similar equipment, and apply one coat of an inhibiting paint and two coats of aluminum paint.
Subsection:	716.04.01. Poles.
Revision:	Change the subsection heading to 716.04.01 Pole and replace the last sentence of the subsection with the following: The Department will not measure anchor bolts, washers, nuts, anchor bolt covers, ground lugs, and any associated hardware for payment and will consider them incidental to this item of work.
Subsection:	716.04.02 High Mast Pole.
Revision:	Replace the second sentence with the following: The Department will not measure the lowering device, anchor bolts, head frame assembly, cables, winch unit, power cables, wiring, connectors, circuit breakers, grounding lugs, ground wire, ground rods, conduits, test plugs,, adjustment and calibration of the unit to provide the desired operation, and any associated hardware for payment and will consider them incidental to this item of work.
Subsection:	716.04.03 Bracket.
Revision:	Replace the second sentence with the following: The Department will not measure any associated hardware needed for attaching the bracket to the pole for payment and will consider them incidental to this item of work.
Subsection:	716.04.04 Pole Base.
Revision:	Change the subsection heading to 716.04.04 Pole Bases and delete the paragraph.
Subsection:	716.04.04 Pole Bases.
Revision:	<p>Insert the following:</p> <p>A. Pole Base. The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction of the Engineer, and any associated hardware for payment and will consider them incidental to this item of work.</p> <p>B. Pole Base High Mast. The Department will measure the quantity in cubic yards furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction of the Engineer, and any associated hardware for payment and will consider them incidental to this item of work.</p>

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Subsection:	716.04.05 Pole Base in Median Wall.
Revision:	Replace the last sentence with the following: The Department will not measure conduits, fittings, junction boxes, additional reinforcing steel, ground rods, ground wire, ground lugs, and aluminum cover plates (if specified) for payment, and will consider them incidental to this item of work.
Subsection:	716.04.06 Transformer Base.
Revision:	Replace the last sentence with the following: The Department will not measure transformer door, ground lug, anchoring bolts, nuts, washers, and any associated hardware for payment and will consider them incidental to this item of work. The filling of any unused holes will also be considered incidental to this item of work.
Subsection:	716.04.07 Pole with Secondary Equipment.
Revision:	Replace the heading with the following: 716.04.07 Pole with Secondary Control Equipment.
Subsection:	716.04.07 Pole with Secondary Control Equipment.
Revision:	Replace the second and third sentence with the following: The Department will not measure mounting the cabinet to the pole, backfilling, restoration, any necessary hardware to anchor pole, electrical inspection fees, and required building fees involving utility secondary, and primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The filling of unused holes will also be considered incidental to this item of work.
Subsection:	716.04.08 Lighting Control Equipment.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure the concrete base, excavation, backfilling, restoration, any necessary anchors, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work.
Subsection:	716.04.09 Luminaire.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure lamps, starters, ballasts, drivers, surge protection, dimming modules, photo-control receptacle, specified shielding (if required), and any adjustments necessary to provide the desired lighting pattern for payment and will consider them incidental to this item of work.
Subsection:	716.04.10 Fused Connector Kits.
Revision:	Replace the heading with the following: 716.04.10 Fuse Connector Kits.

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Subsection:	716.04.10 Fuse Connector Kits.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure fuses/lugs for payment and will consider them incidental to this item of work.
Subsection:	716.04.11 Conduit.
Revision:	Replace the second sentence with the following: The Department will not measure installation in ground or on structures, conduit fittings, test plugs, expansion joints with bonding straps, grounding lugs, drill anchors, clamps, and any additional hardware required for payment and will consider them incidental to this item of work.
Subsection:	716.04.12 Markers.
Revision:	Replace the section with the following: The Department will measure the quantity as each individual unit furnished and installed.
Subsection:	716.04.13 Junction Box.
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.
Subsection:	716.04.13 Electrical Junction Box Type Various.
Revision:	Replace the section with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure additional junction boxes for greater depths than those identified in Plans, #57 aggregate, backfilling, restoration of disturbed areas to the satisfaction of the Engineer, geotextile filter fabric, concrete, hot dipped galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for payment , and will consider them incidental to this item of work.
Subsection:	716.04.13 Junction Box.
Part:	A) Junction Electrical.
Revision:	Delete Part A.
Subsection:	716.04.14 Trenching and Backfilling.
Revision:	Replace the section with the following: The Department will measure the quantity in linear feet. The Department will not measure excavation, backfilling, underground utility warning tape (if required), and the restoration of disturbed areas to original condition for payment and will consider them incidental to this item of work.
Subsection:	716.04.15 Wire or Cable.
Revision:	Replace the section with the following: The Department will measure the quantity in linear feet furnished and installed. The Department will not measure installation within conduit, splice boots, and any other hardware required for installing cable for payment and will consider them incidental to this item of work.
Subsection:	716.04.16 Ducted Cable.
Revision:	Replace the second sentence of the paragraph with the following: The Department will not measure installation within trench or conduit and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	716.04.17 Temporary Lighting
Revision:	Rename the subsection as follows: 716.04.17 Temporary Lighting/Maintain Lighting.

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Subsection:	716.04.17 Temporary Lighting/Maintain Lighting.																														
Revision:	Delete the paragraph and add the following parts: A) Temporary Lighting. The Department will measure the quantity by lump sum. The Department will not measure poles, luminaires, wire, conduit, trenching and backfilling, control equipment, all relocations and removal, design (if required), and any other necessary hardware to make a complete installation for payment and will consider them incidental to this item of work. B) Maintain Lighting. The Department will measure the quantity by lump sum. The Department will not measure maintenance of lighting elements and design (if required) for payment and will consider them incidental to this item of work.																														
Subsection:	716.04.18 Remove Lighting.																														
Revision:	Replace the paragraph with the following: The Department will measure the quantity by lump sum. The Department will not measure backfilling and the disposal or transportation of equipment and materials associated with any structural or electrical component of the lighting system including, but not limited to pole bases, poles, junction boxes, cabinets, and wood poles for payment and will consider them incidental to this item of work.																														
Subsection:	716.04.19 Remove Pole Base.																														
Revision:	Delete Subsection.																														
Subsection:	716.04.20 Bore and Jack Conduit.																														
Revision:	Renumber Subsection to 716.04.19 Bore and Jack Conduit.																														
Subsection:	716.04.19 Bore and Jack Conduit.																														
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear feet. This item shall include all work necessary for boring and installing conduit under an existing roadway.																														
Subsection:	716.05 PAYMENT.																														
Revision:	Revise the following under <u>Code</u> , <u>Pay Item</u> , and <u>Pay Unit</u> with the following: <table><tr><td><u>Code</u></td><td><u>Pay Item</u></td><td><u>Pay Unit</u></td></tr><tr><td>04700-04701</td><td>Pole(Various)Mtg Ht</td><td>Each</td></tr><tr><td>04710-04714</td><td>Pole(Various)Mtg Ht High Mast</td><td>Each</td></tr><tr><td>04810-04811</td><td>Electrical Junction Box (Various)</td><td>Each</td></tr><tr><td>20391NS835</td><td>Electrical Junction Box Type A</td><td>Each</td></tr><tr><td>20392NS835</td><td>Electrical Junction Box Type C</td><td>Each</td></tr><tr><td>04770-04773</td><td>Luminaire (Various)</td><td>Each</td></tr><tr><td>04780</td><td>Fuse Connector Kit</td><td>Each</td></tr><tr><td>20410ED</td><td>Maintain Lighting</td><td>Lump Sum</td></tr><tr><td>04941</td><td>Remove Pole Base</td><td>Each</td></tr></table>	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>	04700-04701	Pole(Various)Mtg Ht	Each	04710-04714	Pole(Various)Mtg Ht High Mast	Each	04810-04811	Electrical Junction Box (Various)	Each	20391NS835	Electrical Junction Box Type A	Each	20392NS835	Electrical Junction Box Type C	Each	04770-04773	Luminaire (Various)	Each	04780	Fuse Connector Kit	Each	20410ED	Maintain Lighting	Lump Sum	04941	Remove Pole Base	Each
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20410ED	Maintain Lighting	Lump Sum																													
04941	Remove Pole Base	Each																													
Subsection:	723.02.02 Paint.																														
Revision:	Replace sentence with the following: Conform to Section 821.																														
Subsection:	723.03 CONSTRUCTION.																														
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims,																														
Subsection:	723.03.02 Poles and Bases Installation.																														
Revision:	Replace the title with the following: 723.03.02 Pole and Base Installation.																														

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Subsection:	723.03.02 Pole and Base Installation.
Revision:	Replace the first paragraph with the following: Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum of four feet from the front face of the guardrail to the front face of the pole base. Orient the handhole door away from traffic travel path. If pole base is installed within a sidewalk the top of the pole base shall be the same grade as the sidewalk.
Subsection:	723.03.02 Poles and Bases Installation.
Part:	A) Steel Strain and Mastarm Poles Installation
Revision:	Replace the title of Part A) Steel Strain and Mast Arm Pole Installation.
Subsection:	723.03.02 Pole and Base Installation.
Part:	A) Steel Strain and Mast Arm Pole Installation.
Revision:	Insert the following sentence at the beginning of the first paragraph: Install pole bases 4 to 6 inches above grade.
Subsection:	723.03.02 Pole and Base Installation.
Part:	A) Steel Strain and Mast Arm Pole Installation.
Revision:	Replace the second paragraph with the following: For concrete base installation, see Subsection 716.03.02 B), 2), Paragraphs 2-6. Drilled shaft depth shall be based on the soil conditions encountered during drilling and slope condition at the site. Refer to the design chart below:
Subsection:	723.03.02 Pole and Base Installation.
Part:	B) Pedestal or Pedestal Post Installation.
Revision:	Replace the second sentence with the following: If over 12 feet high the base shall have the minimum depth and diameter as Subsection 716.03.02 (A), paragraph 2.
Subsection:	723.03.02 Poles and Bases Installation.
Part:	B) Pedestal or Pedestal Post Installation.
Revision:	Replace the fourth sentence of the paragraph with the following: For breakaway supports, conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.
Subsection:	723.03.03 Trenching.
Revision:	Replace the first sentence with the following: See Subsection 716.03.03 (B).
Subsection:	723.03.03 Trenching.
Part:	A) Under Roadway.
Revision:	Delete Part A) Under Roadway.
Subsection:	723.03.05 Conduit Requirements in Junction Boxes.
Revision:	Delete the Subsection and replace with the following: 723.03.05 Fuse Connector Kits. See Subsection 716.03.09.
Subsection:	723.03.06 Coupling Installation.
Revision:	Delete the Subsection and replace with the following: 723.03.06 Painting. See Subsection 716.03.15.
Subsection:	723.03.07 Bonding Requirements.
Revision:	Delete the Subsection and replace with the following: 723.03.07 Electrical Junction Boxes. See Subsection 716.03.10.

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Subsection:	723.03.08 Painting.
Revision:	Replace with 723.03.06 Painting. See Subsection 716.03.15.
Subsection:	723.03.09 Underground Warning Tape.
Revision:	ReNUMBER Subsection to 723.03.08 Underground Warning Tape.
Subsection:	723.03.10 Backfilling and Disturbed Areas.
Revision:	ReNUMBER Subsection to 723.03.09 Backfilling and Disturbed Areas.
Subsection:	723.03.11 Wiring Installation.
Revision:	ReNUMBER Subsection to 723.03.10 Wiring Installation.
Subsection:	723.03.10 Wiring Installation.
Revision:	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.
Subsection:	723.03.12 Loop Installation.
Revision:	ReNUMBER Subsection to 723.03.11 Loop Installation.
Subsection:	723.03.11 Loop Installation.
Revision:	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet of loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.
Subsection:	723.03.13 Grounding Installation.
Revision:	ReNUMBER Subsection to 723.03.12 Grounding Installation.
Subsection:	723.03.12 Grounding Installation.
Revision:	Replace the reference to "Standard Detail Sheets" in the first sentence with "Plans".
Subsection:	723.03.14 Splicing.
Revision:	ReNUMBER Subsection to 723.03.13 Splicing.
Subsection:	723.03.13 Splicing.
Revision:	Delete the reference to (IMSA 19-2) from the 5th sentence of the paragraph.
Subsection:	723.03.15 Painting.
Revision:	Delete Subsection.
Subsection:	723.03.14 Splicing.
Revision:	Replace with new Subsection 723.03.14 Remove Signal Equipment.
Subsection:	723.03.14 Remove Signal Equipment.
Revision:	Insert the following for the new subsection: Remove all traffic signal equipment that is identified by the Engineer as no longer necessary including, but not limited to, the following: pole bases, poles, junction boxes, cabinets, wood poles, and advance warning flashers. Pole bases shall be removed a minimum of one foot below finished grade by chipping off or other method that is approved by the Engineer. Dispose of all removed concrete off right-of-way. Wood poles shall be removed a minimum of one foot below finished grade. Backfill holes with material approved by the Engineer. Conduit may be abandoned in the ground. Contact the district traffic Engineer to determine if any removed signal equipment needs to be returned to the district and to determine the location/time for such deliveries.
Subsection:	723.05.16 Drawings.
Revision:	ReNUMBER the Subsection to 723.03.15 Drawings.

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Subsection:	723.03.15 Drawings.
Revision:	Replace Subsection with the following: Before final inspection of the traffic control device, provide a complete set of reproducible as-built drawings that show the arrangement and locations of all equipment including: junction boxes, conduits, spare conduits, etc. Keep a daily record of all conduits placed in trenches, showing the distance from the pavement edge, the depth, and the length of runs, and indicate this information on the as-built drawings.
Subsection:	723.03.17 Acceptance and Inspection Requirements.
Revision:	Renumber Subsection to 723.03.16 Acceptance and Inspection Requirements.
Subsection:	723.03.16 Acceptance and Inspection Requirements.
Revision:	Replace the first paragraph of the section with the following: See Subsection 105.12. In coordination with the District Traffic Engineer, energize traffic control device as soon as it is fully functional and ready for inspection. After the work has been completed, conduct an operational test demonstrating that the system operates in accordance with the Plans in the presence of the Engineer. The Department will also conduct its own tests with its own equipment before final acceptance. Ensure that the traffic control device remains operational until the Division of Traffic Operations has provided written acceptance of the electrical work.
Subsection:	723.04.01 Conduit.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure conduit fittings, ground lugs, test plugs, expansion joints, and clamps for payment and will consider them incidental to this item of work.
Subsection:	723.04.02 Junction Box.
Revision:	Replace subsection title with the following: Electrical Junction Box Type Various.
Subsection:	723.04.02 Electrical Junction Box Type Various.
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure additional junction boxes for greater depths than those identified in Plans, Aggregate (#57), backfilling, restoration of disturbed areas to the satisfaction of the Engineer, geotextile fabric, concrete, hot dipped galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.03 Trenching and Backfilling.
Revision:	Replace the second sentence with the following: The Department will not measure excavation, backfilling, underground utility warning tape, and the restoration of disturbed areas to original condition for payment and will consider them incidental to this item of work.
Subsection:	723.04.04 Open Cut Roadway.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure concrete, reinforcing steel, and asphalt for payment and will consider them incidental to this item of work.
Subsection:	723.04.05 Loop Wire.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.06 Cable.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other hardware for payment and will consider them incidental to this item of work.

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Subsection:	723.04.07 Pole-Wooden.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, and restoring disturbed areas for payment and will consider them incidental to this item of work.
Subsection:	723.04.08 Steel Strain Pole.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, and restoring disturbed areas for payment and will consider them incidental to this item of work.
Subsection:	723.04.09 Mast Arm Pole.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure anchor bolts, arms, mounting brackets, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.10 Signal Pedestal.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure excavation, concrete, reinforcing steel, conduits, fittings, ground rods, ground wire, ground lugs, backfilling, restoring disturbed areas, and other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.11 Post.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, and restoring disturbed areas for payment and will consider them incidental to this item of work.
Subsection:	723.04.12 Anchor.
Revision:	Replace the second sentence of the subsection with the following: . The Department will not measure down-guy, messenger, clamps, guy guard, or insulators, and possible installation in various soil conditions for payment and will consider them incidental to this item of work.
Subsection:	723.04.13 Messenger.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure strand vises, bolts, washers, and other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.14 Install Signal LED.
Revision:	Revise subsection title to 723.04.14 Install Beacon Controller - 2 Circuit.
Subsection:	723.04.14 Install Beacon Controller - 2 Circuit.
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure the controller housing, mounting equipment, S5-1 school zone sign, time clock, nema flasher, ground rods, ground wires, ground lugs, metering disconnect hardware, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work.

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Subsection:	723.04.15 Loop Saw Slot and Fill.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure sawing, cleaning, filling induction loop saw slot, loop sealant, backer rod, drilling hole for conduit, and grout for payment and will consider them incidental to this item of work.
Subsection:	723.04.16 Pedestrian Detector.
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished, installed and connected to pole/pedestal. The Department will not measure installing R10-3e signs, detector housing, and installing mounting hardware for sign for payment and will consider them incidental to this item of work.
Subsection:	723.04.17 Signal.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure furnishing and installing LED modules, retroreflective tape, back plates, and any other hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.18 Signal Controller- Type 170.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure the concrete base, mounting the cabinet, connecting the signal and detectors, excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, electrical inspection fees, and building fees involving secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian isolators, load switches, model 400 modem card, electrical service conductors, conduits, anchors, meter base, fused cutout, fuses, ground rods, ground wires, and ground lugs for payment and will consider them incidental to this item of work.
Subsection:	723.04.19 Beacon Controller - 2 Circuit.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure the controller housing, mounting equipment, S5-1 school zone sign, time clock, nema flasher, ground rods, ground wires, ground lugs, metering disconnect hardware, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work.
Subsection:	723.04.20 Install Signal Controller - Type 170.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each individual unit installed. The Department will not measure the concrete base, mounting the cabinet, connecting the signal and detectors, excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure connecting the induction loop amplifiers, pedestrian isolators, load switches, model 400 modem card for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, conduits, anchors, meter base, fused cutout, fuses, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work.
Subsection:	723.04.21 Install Steel Strain Pole.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure any necessary clamp assemblies for payment and will consider them incidental to this item of work.

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Subsection:	723.04.22 Remove Signal Equipment.
Revision:	Replace the paragraph with the following: The Department will measure the quantity by lump sum. The Department will not measure backfilling and the disposal or transportation of equipment and materials associated with any structural or electrical component of the signal system including, but not limited to pole bases, poles, junction boxes, cabinets, and wood poles for payment and will consider them incidental to this item of work.
Subsection:	723.04.23 Install Span/Pole Mounted Sign.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure the hanger or any other hardware necessary to install the sign for payment and will consider them incidental to this item of work.
Subsection:	723.04.24 Install Pedestrian Head LED.
Revision:	Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.25 Install Signal LED.
Revision:	Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules, retroreflective tape, back plates, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.26 Install Coordinating Unit.
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit installed. The Department will not measure radio, modem, cable(s), antenna(s), router, repeater, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.27 Video Camera.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure video modules, mounting bracket, truss type arm, power cable, coaxial cable, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.28 Install Pedestrian Detector Audible.
Revision:	Replace the second sentence with the following: The Department will not measure installing R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.29 Audible Pedestrian Detector.
Revision:	Replace the second sentence with the following: The Department will not measure furnishing and installing the R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.30 Bore and Jack Conduit.
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear feet. This item shall include all work necessary for boring and installing conduit under an existing roadway.

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Subsection:	723.04.31 Install Pedestrian Detector.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each individual unit installed and connected to pole/pedestal. The Department will not measure installing R 10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.32 Install Mast Arm Pole.
Revision:	Replace the second sentence with the following: The Department will not measure installation of arms, signal mounting brackets, anchor bolts, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.33 Pedestal Post.
Revision:	Replace the second sentence with the following: The Department will not measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, ground lugs, or any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.34 Span Mounted Sign.
Revision:	Revise subsection title to 723.04.34 Span/Pole-Mounted Sign.
Subsection:	723.04.34 Span/Pole-Mounted Sign.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure the hanger, sign, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.35 Remove and Reinstall Coordinating Unit.
Revision:	Add the following sentence to the end of the subsection: The Department will not measure removing, storage, reinstalling, and connecting radio, modem, cable(s), antenna(s), router, repeater, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.36 Traffic Signal Pole Base.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, restoration, furnishing and installing reinforcing steel, anchor bolts, conduits, ground rods, ground wires, and ground lugs for payment and will consider them incidental to this item of work.
Subsection:	723.04.37 Install Signal Pedestal.
Revision:	Replace the second sentence of the subsection with the following: . The Department will not measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing steel, conduits, fittings, ground rod, ground wire, ground lugs, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.38 Install Pedestal Post.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing steel, conduit, fittings, ground rod, ground wire, ground lugs, and any other necessary hardware for payment and will consider them incidental to this item of work.
Subsection:	723.04.39 Install Antenna.
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure any other materials necessary to complete the installation for payment and will consider them incidental to this item of work.

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Subsection:	723.05 PAYMENT.		
Revision:	Replace items 04810-04811, 20391NS835, 20392NS835,23052NN and add item number 24526ED under <u>Code</u> , <u>Pay Item</u> , and <u>Pay Unit</u> with the following:		
	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
	04810	Electrical Junction Box	Each
	04811	Electrical Junction Box Type B	Each
	20391NS835	Electrical Junction Box Type A	Each
	20392NS835	Electrical Junction Box Type C	Each
	23052NN	Span/Pole-Mounted Sign	Each
	24526ED	Install Beacon Controller 2 Cir	Each
Subsection:	801.01 REQUIREMENTS		
Revision:	Replace first sentence in paragraph one with the following: Provide Portland cement <i>or blended hydraulic cement</i> from approved mills listed in the Department's List of Approved Materials.		
Subsection:	801.01 REQUIREMENTS		
Number:	1)		
Revision:	Replace first sentence with the following: Type I, II, III, and IV <i>Portland cement</i> conforms to ASTM C 150.		
Subsection:	801.01 REQUIREMENTS		
Number:	3)		
Revision:	Replace the first sentence with the following: Type IP (≤20), Portland-pozzolan cement, conforms to ASTM C595, and the following additional requirements to Type IP (≤20).		
Subsection:	801.01 REQUIREMENTS		
Number:	3)		
Part:	b)		
Revision:	Delete part b)		
Subsection:	801.01 REQUIREMENTS		
Number:	3)		
Part:	c)		
Revision:	Rename Part c) to Part b) and replace the text with the following: The cement manufacturer shall furnish to the Engineer reports showing the results of tests performed on the fly ash used in the manufacture of the Type IP(≤20) cement shipped to the project.		
Subsection:	801.01 REQUIREMENTS		
Number:	3)		
Part:	d)		
Revision:	Rename Part d) to Part c)		
Subsection:	801.01 REQUIREMENTS		
Number:	3)		
Part:	e)		
Revision:	Rename Part e) to Part d) and replace the text with the following: Use only one brand of Type IP(≤20) cement throughout the project, unless the Engineer approved a change in brand in writing.		
Subsection:	801.01 REQUIREMENTS		
Number:	4)		
Revision:	Replace first sentence with the following: Type IS(≤30), Portland blast furnace slag cement, conforms to ASTM C 595 and the following requirements:		

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Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	a)
Revision:	Replace part a) with the following: Use Grade 100 or 120 blast furnace slag cement conforming to the requirements of ASTM C 989.
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	b)
Revision:	Delete part b)
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	c)
Revision:	Rename Part c) to Part b) and replace the text with the following: The cement manufacturer shall furnish to the Engineer reports showing the results of the tests performed on the blast furnace slag cement used in the manufacturing of the Type IS(≤ 30) shipped to the project.
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	d)
Revision:	Rename Part d) to Part c)
Subsection:	801.01 REQUIREMENTS
Number:	4)
Part:	e)
Revision:	Rename Part e) to Part d) and replace the text with the following: Use only one brand of Type IS(≤ 30) cement throughout the project, unless the Engineer approves otherwise.
Subsection:	801.01 REQUIREMENTS
Number:	5)
Revision:	Insert part 5) as the following: Type IL(5-15), Portland-limestone cement, conforms to ASTM C 595 and the following additional requirements:
Subsection:	801.01 REQUIREMENTS
Number:	5)
Part:	a)
Revision:	Insert part a) as the following: The cement manufacturer shall furnish to the Engineer reports showing the results of test performed on the limestone used in the manufacture of the Type IL cement shipped to the project.
Subsection:	801.01 REQUIREMENTS
Number:	5)
Part:	b)
Revision:	Insert part b) as the following: Use only one brand of Type IL cement throughout the project, unless the Engineer approves a brand change in writing.
Subsection:	801.01 REQUIREMENTS
Number:	5)
Part:	c)
Revision:	Insert part c) as the following: The Type IL blended cement shall be an intimate and uniform blend produced by intergrinding of the Portland cement and limestone.
Subsection:	804.01.02 Crushed Sand.
Revision:	Delete last sentence of the section.

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Subsection:	804.01.06 Slag.														
Revision:	Add subsection and following sentence. Provide blast furnace slag sand where permitted. The Department will allow steel slag sand only in asphalt surface applications.														
Subsection:	804.04 Asphalt Mixtures.														
Revision:	Replace the subsection with the following: Provide natural, crushed, conglomerate, or blast furnace slag sand, with the addition of filler as necessary, to meet gradation requirements. The Department will allow any combination of natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved using cold feeds at the plant. The Engineer may allow other fine aggregates.														
Subsection:	806.03.01 General Requirements.														
Revision:	Replace the second sentence of the paragraph with the following: Additionally, the material must have a minimum solubility of 99.0 percent when tested according to AASHTO T 44 and PG 76-22 must exhibit a minimum recovery of 60 percent, with a J _{NR} (non-recoverable creep compliance) between 0.1 and 0.5, when tested according to AASHTO TP 70.														
Subsection:	806.03.01 General Requirements.														
Table:	PG Binder Requirements and Price Adjustment Schedule														
Revision:	Replace the Elastic Recovery, % ⁽³⁾ (AASHTO T301) and all corresponding values in the table with the following: <table><tr><td><u>Test</u></td><td><u>Specification</u></td><td><u>100% Pay</u></td><td><u>90% Pay</u></td><td><u>80% Pay</u></td><td><u>70% Pay</u></td><td><u>50%Pay⁽¹⁾</u></td></tr><tr><td>MSCR recovery, % ⁽³⁾ (AASHTO TP 70)</td><td>60 Min.</td><td>≥58</td><td>56</td><td>55</td><td>54</td><td><53</td></tr></table>	<u>Test</u>	<u>Specification</u>	<u>100% Pay</u>	<u>90% Pay</u>	<u>80% Pay</u>	<u>70% Pay</u>	<u>50%Pay⁽¹⁾</u>	MSCR recovery, % ⁽³⁾ (AASHTO TP 70)	60 Min.	≥58	56	55	54	<53
<u>Test</u>	<u>Specification</u>	<u>100% Pay</u>	<u>90% Pay</u>	<u>80% Pay</u>	<u>70% Pay</u>	<u>50%Pay⁽¹⁾</u>									
MSCR recovery, % ⁽³⁾ (AASHTO TP 70)	60 Min.	≥58	56	55	54	<53									
Subsection:	806.03.01 General Requirements.														
Table:	PG Binder Requirements and Price Adjustment Schedule														
Superscript:	(3)														
Revision:	Replace ⁽³⁾ with the following: Perform testing at 64°C.														
Subsection:	808.07 Polypropylene Waterproofing Membrane.														
Revision:	Replace the paragraph and table with the following: Furnish a layered waterproofing membrane. The layers will consist of an internal puncture resistant woven polypropylene fabric sandwiched between two rubberized mastic layers. The mastic will have a heavy polyethylene membrane attached on the top and the bottom mastic layer will be covered by a protective release film.														
Subsection:	808.09 Acceptance.														
Revision:	Replace the reference to "KMIMS" in the second paragraph with SiteManager.														
Subsection:	811.10.04 Properties of the Coated Bar.														
Part:	B) Flexibility of Coating.														
Revision:	Replace the second sentence of the paragraph with the following: Ensure that the coated bars are capable of being bent to 180 degrees (after rebound) over a mandrel, without any visible evidence of cracking the coating.														
Subsection:	813.04 Gray Iron Castings.														
Revision:	Replace the reference to "AASHTO M105" with "ASTM A48".														
Subsection:	813.09.02 High Strength Steel Bolts, Nuts, and Washers.														
Number:	A) Bolts.														
Revision:	Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.														

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Subsection:	814.04.02 Timber Guardrail Posts.
Revision:	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".
Subsection:	814.04.02 Timber Guardrail Posts.
Revision:	Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.
Subsection:	814.04.02 Timber Guardrail Posts.
Revision:	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph 4.1".
Subsection:	814.04.02 Timber Guardrail Posts.
Revision:	Delete the second sentence of the fourth paragraph.
Subsection:	814.05.02 Composite Plastic.
Revision:	1) Add the following to the beginning of the first paragraph: Select composite offset blocks conforming to this section and assure blocks are from a manufacturer included on the Department's List of Approved Materials. 2) Delete the last paragraph of the subsection.
Subsection:	816.07.02 Wood Posts and Braces.
Revision:	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph 4.1".
Subsection:	816.07.02 Wood Posts and Braces.
Revision:	Delete the second sentence of the first paragraph.
Subsection:	818.07 Preservative Treatment.
Revision:	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".
Subsection:	833.01.02 Sheeting Signs.
Revision:	Replace the second sentence with the following: Provide a thickness of 125 mils if any single edge dimension of the sign exceeds 3 feet.
Subsection:	834.14 Lighting Poles.
Revision:	Replace the first sentence with the following: Lighting pole design shall be in accordance with loading and allowable stress requirements of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims, with the exception of the following: The Cabinet will waive the requirement stated in the first sentence of Section 5.14.6.2 – Reinforced Holes and Cutouts for high mast poles (only). The minimum diameter at the base of the pole shall be 22 inches for high mast poles (only).
Subsection:	834.14.03 High Mast Poles.
Revision:	Remove the second and fourth sentence from the first paragraph.
Subsection:	834.14.03 High Mast Poles.
Revision:	Replace the third paragraph with the following: Provide calculations and drawings that are stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.

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Subsection:	834.14.03 High Mast Poles.
Revision:	<p>Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595 grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the inside diameter of the exposed end of the female section. Use longitudinal seam welds as commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with a telescopic welded joint or a full penetration groove weld with backup bar.</p> <p>The handhole cover shall be removable from the handhole frame. One the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube of the pole but needs to be at least 15 inches. Provide products that are hot-dip galvanized to the requirements of either ASTM A123 (fabricated products) or ASTM A 153 (hardware items).</p>
Subsection:	834.16 ANCHOR BOLTS.
Revision:	Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.
Subsection:	834.17.01 Conventional.
Revision:	Add the following sentence after the second sentence: Provide a waterproof sticker mounted on the bottom of the housing that is legible from the ground and indicates the wattage of the fixture by providing the first two numbers of the wattage.
Subsection:	834.21.01 Waterproof Enclosures.
Revision:	<p>Replace the last five sentences in the second paragraph with the following sentences: Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex receptacle in the enclosure with a separate 20 amp breaker.</p>

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Subsection:	835.07 Traffic Poles.
Revision:	Replace the first sentence of the first paragraph with the following: Pole diameter and wall thickness shall be calculated in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.
Subsection:	835.07 Traffic Poles.
Revision:	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates have a thickness ≥ 2 inches. *Add the following sentence to the end of the fourth paragraph: The bottom pole diameter shall not be less than 16.25 inches.
Subsection:	835.07 Traffic Poles.
Revision:	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design, pole forces shall be positioned in such a manner to maximize the force on any individual anchor bolt regardless of the actual anchor bolt orientation with the pole.
Subsection:	835.07 Traffic Poles.
Revision:	Replace the first and second sentence of the sixth paragraph with the following: The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube but needs to be at least 12 inches.
Subsection:	835.07 Traffic Poles.
Revision:	*Replace the first sentence of the last paragraph with the following: Provide calculations and drawings that are stamped by a Professional Engineer licensed in the Commonwealth of Kentucky. *Replace the third sentence of the last paragraph with the following: All tables referenced in 835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.
Subsection:	835.07.01 Steel Strain Poles.
Revision:	Replace the second sentence of the second paragraph with the following: The detailed analysis shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.
Subsection:	835.07.01 Steel Strain Poles.
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations should be shown for all fatigue related connections. Provide the corresponding detail, stress category and example from table 11.9.3.1-1.
Subsection:	835.07.02 Mast Arm Poles.
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analysis shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.

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Subsection:	835.07.02 Mast Arm Poles.		
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations should be shown for all fatigue related connections. Provide the corresponding detail, stress category and example from table 11.9.3.1-1.		
Subsection:	835.07.03 Anchor Bolts.		
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be used for the headed part of the anchor bolt when designed in this manner) provided per pole. Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galvanized (ASTM A 153).		
Subsection:	835.16.05 Optical Units.		
Revision:	Replace the 3rd paragraph with the following: The list of certified products can be found on the following website: http://www.intertek.com .		
Subsection:	835.19.01 Pedestrian Detector Body.		
Revision:	Replace the first sentence with the following: Provide a four holed pole mounted aluminum rectangular housing that is compatible with the pedestrian detector.		
Subsection:	843.01.01 Geotextile Fabric.		
Table:	TYPE I FABRIC GEOTEXTILES FOR SLOPE PROTECTION AND CHANNEL LINING		
Revision:	Add the following to the chart:		
	<u>Property</u>	<u>Minimum Value⁽¹⁾</u>	<u>Test Method</u>
	CBR Puncture (lbs)	494	ASTM D6241
	Permittivity (1/s)	0.7	ASTM D4491
Subsection:	843.01.01 Geotextile Fabric.		
Table:	TYPE II FABRIC GEOTEXTILES FOR UNDERDRAINS		
Revision:	Add the following to the chart:		
	<u>Property</u>	<u>Minimum Value⁽¹⁾</u>	<u>Test Method</u>
	CBR Puncture (lbs)	210	ASTM D6241
	Permittivity (1/s)	0.5	ASTM D4491
Subsection:	843.01.01 Geotextile Fabric.		
Table:	TYPE III FABRIC GEOTEXTILES FOR SUBGRADE OR EMBANKMENT STABILIZATION		
Revision:	Add the following to the chart:		
	<u>Property</u>	<u>Minimum Value⁽¹⁾</u>	<u>Test Method</u>
	CBR Puncture (lbs)	370	ASTM D6241
	Permittivity (1/s)	0.05	ASTM D4491
Subsection:	843.01.01 Geotextile Fabric.		
Table:	TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS		
Revision:	Add the following to the chart:		
	<u>Property</u>	<u>Minimum Value⁽¹⁾</u>	<u>Test Method</u>
	CBR Puncture (lbs)	309	ASTM D6241
	Permittivity (1/s)	0.5	ASTM D4491

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Subsection:	843.01.01 Geotextile Fabric.		
Table:	TYPE V HIGH STRENGTH GEOTEXTILE FABRIC		
Revision:	Make the following changes to the chart:		
	<u>Property</u>	<u>Minimum Value⁽¹⁾</u>	<u>Test Method</u>
	CBR Puncture (lbs)	618	ASTM D6241
	Apparent Opening Size	U.S. #40 ⁽³⁾	ASTM D4751
	⁽³⁾ Maximum average roll value.		

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SPECIAL NOTE FOR ALUMINUM AND STEEL STRUCTURAL PLATE BOX CULVERTS

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Furnish and install either an aluminum or a steel structural plate box culvert as the Contract specifies.

2.0 MATERIALS.

2.1 Structure. These structures consist of prefabricated sections assembled and erected at the site. Prefabricated sections consist of corrugated aluminum or steel plates, as the Contract specifies, which have been factory shaped, punched, and coated when required. The Department will not permit field modification except for tapping saddles or other devices to permit passage of other conduits or utilities through the structure. Furnish and install all auxiliary items such as ribs, wales, stiffeners, footing pads, etc. that the design requires. Furnish and install endwalls and toewalls when the plans require them. When endwalls are required, construct full height wing sections. Do not field bevel cut wing sections.

Before beginning erection, furnish to the Engineer applicable shop drawings, erection layouts, and manufacturer's brochures for submittal to the Division of Construction. Indicate the location of the drawing number, design load (as applicable), contract award year, and contractor stencils on the shop drawings. If a drawing number has not been assigned for the structure, obtain one from the Division of Structural Design. The Department will accept plates and accessories by certificate of compliance from the manufacturer. Upon completion of construction, submit to the Division of Structural Design an as-built set of structure plans and reviewed shop drawings in 22 inch by 36 inch Portable Document Format (PDF) for archiving.

2.1.1 Aluminum Structure. Obtain the aluminum structural plate box culvert, and aluminum endwalls or toewalls when required, from either Contech Construction Products or Lane Metal Products.

The Department will accept comparable aluminum structures produced by other companies when the Engineer approves. For such approval, submit sufficient data and design calculations to show that the proposed structures are equal in all respects to the Contech product and also include evidence of actual installations now in service that are performing satisfactorily. Design according to the current AASHTO LRFD Bridge Design Specifications, except design for KYHL-93 live load. The KYHL-93 live load is arrived at by increasing the standard AASHTO HL-93 truck and lane loads as specified in the AASHTO Specifications by 25%. Do not consider as a tunnel or tunnel liner plate for design. Before beginning erection, furnish the Engineer applicable shop drawings and structural design calculations performed, stamped, and signed by a qualified Professional Engineer licensed to practice in the State of Kentucky.

Use aluminum accessories and plates, of the plan specified thickness, that conforms to AASHTO M 219 or ASTM B 308 as applicable.

Where non-aluminum utilities are passed through, insulate with an aluminastic compound or approved equal, to prevent bi-metallic contact.

2.1.2 Steel Structure. Use either (1) Contech Construction Products'

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Multi-Plate Steel Box Culvert; or (2) Lane Metal Products Company's Low Profile Box Culvert.

The Department will accept comparable steel structures produced by other companies when the Engineer approves. For such approval, submit sufficient data and design calculations to show that the proposed structures are equal in all respects to those specified above and also include evidence of actual installations now in service that are performing satisfactorily. Design according to the current AASHTO LRFD Bridge Design Specifications, except design for KYHL-93 live load. The KYHL-93 live load is arrived at by increasing the standard AASHTO HL-93 truck and lane loads as specified in the AASHTO Specifications by 25%. Do not consider as a tunnel or tunnel liner plate for design. Before beginning erection, furnish the Engineer applicable shop drawings and structural design calculations performed, stamped, and signed by a qualified Professional Engineer licensed to practice in the State of Kentucky.

Use steel accessories and plates, of the plan specified thickness, that conform to AASHTO M 167 for galvanized steel.

2.2 Asphalt Coating. On all steel drainage structures, except those installed as railroad tunnels, cattle underpasses, bicycle or pedestrian underpasses, or similar dry conditions, apply an asphalt coating conforming to Subsection 806.06.

2.3 Bedding Material. Use granular material with 100% passing 1 inch sieve that conforms to Subsection 804.08. Bedding shall be placed at a minimum thickness of twice the corrugation depth.

2.4 Backfill Material. Select any of the following alternates and obtain the Engineers approval.

- 1) well graded or uniformly graded bank or creek gravel, crushed or uncrushed, up to 3 inches maximum size;
- 2) well graded or uniformly graded natural or crushed sand;
- 3) finely shot limestone or sandstone providing no individual fragment is larger than 3 inches and the material contains no more than 5 percent dirt and/or shale, as determined by visual inspection by the Engineer;
- 4) crushed stone or crushed slag up to 3 inches maximum size (except DGA or Size No. 610);
- 5) other locally available materials meeting the approval of the Engineer (local soils conforming to soil classifications A-2-4 or A-2-5 from AASHTO M 145 will be acceptable). Do not use plastic soils, or materials containing significant amounts of nondurable shale (SDI < 95 by KM 64-513); or
- 6) flowable fill conforming to Subsection 601.03.03, B), 5).

2.5 Foundation Material. Use material capable of supporting the imposed loads due to backfill weight and footing pressures of 2 tons per square foot.

3.0 CONSTRUCTION.

3.1 Technical Representative. Provide a technical representative from the structure manufacturer to advise at the start of the project. Ensure the technical representative is available thereafter to assist in the event problems or special circumstances arise.

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Technical assistance shall be provided at no additional cost to the Department.

3.2 Site Preparation. Perform structure excavation according to Section 603, except as modified herein.

On structures with footing pads, excavate trenches 3 inches below the elevation shown on the plans, and level the bottom of the trench with 3 inches of bedding material before placing the footing pads.

On structures with a full metal invert, excavate the entire area covered by the invert plates to accommodate bedding material placement to a minimum thickness of twice the corrugation depth before placing the invert plates.

Take soundings for foundation design at the inlet and outlet of each culvert and at intervals no greater than 20 feet along the grade line of the bottom of the culvert, to a depth of one foot. Make soundings on the centerline and at each edge of the culvert. Where ledge rock, gravel, hardpan, or other unyielding material is encountered or known to exist within the limits stated, perform excavation in the area under the invert plates or footing pads. Extend the additional excavation to a depth of $0.042 H$ below the bottom of the metal plates, where H is the height of fill above the top of the culvert. However, regardless of the height of fill, the Department will require the additional depth to be a minimum of one foot and will not require it to be more than $0.75 H_c$, where H_c is the total height of the culvert.

Backfill the additional excavation with an earth cushion of firmly compacted fine soils in layers of 6 inches or less, prior to placing the sand bedding layer.

Excavate cross trenches as necessary to place metal toewalls when the plans require them.

Excavate a minimum width of the outside dimension of the box culvert including footing pads or invert plates plus 6 inches on each side.

Proper bedding preparation is critical for satisfactory performance of the box culvert. Place the bed for footing pads or invert plates to uniform lines and grade to avoid distortions and undesirable stresses in the structure.

Construct concrete footings or bottom slabs in accordance with the plans and standard specifications.

3.3 Installation. Erect the culvert, and endwalls when required, in strict accordance with the manufacturer's recommendations. The Department will allow offsite assembly of the structure, provided prior approval is obtained, and assembly is in accordance with the manufacturer's instructions. Structural plates shall be assembled with their inside circumferential sheet laps pointing downstream. Align plates circumferentially to avoid permanent distortion from the specified shape. Ensure the width and height of the completed structure is within 2 percent of the specified dimensions or 2 inches, whichever is greater.

Tighten bolts in the erected structure according to the manufacturer's recommendations, with good seam laps, while in proper shape, using nuts and bolts the manufacturer supplies. Construct concrete footings and headwalls in accordance with the plans.

Install the ribs, wales, and toewalls when required, according to the manufacturer's recommendations.

In side-by-side installations, install the box culverts with footing pads or invert plates of each culvert no closer than 2 feet to the footing pads or invert plates of the adjacent culvert, unless the plans show otherwise. Excavate the entire volume between the culverts and place backfill.

3.4 Backfill. Proper placement and compaction of backfill are essential to obtain

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maximum strength and stability of the finished structure. Use equipment and construction procedures to prevent excessive structure distortion from occurring. The manufacturer of the structure will specify the magnitude of allowable shape changes during backfill. Monitor the shape of the structure to control distortion until all backfilling operations are completed.

On structures with concrete footing pads, backfill the trench for the pads to the flowline inside the culvert before outside backfilling begins.

Place granular backfill material in horizontal layers not exceeding 6 inches loose depth, and bring up uniformly on both sides of the structure. Compact each layer to the same level on all sides before proceeding to the next lift. Do not use compaction equipment or methods that produce earth pressures that cause distortion or damage. Place material on top of the structure at right angles to the centerline of the structure. Compact each layer of backfill to a density of at least 95 percent of the maximum density according to KM 64-511. The Department will determine the in-place density using nuclear gages. The Engineer may waive density testing when not feasible due to the nature of the material. When using flowable fill, place according to Subsection 601.03.09, C).

If the structure is not installed in a full depth trench, use backfill material for embankment adjacent to the structure for a distance equal to the span width on each side of the box culvert and to a height of 2 feet or subgrade elevation, whichever is lower, above the structure.

3.5 Construction Loads. Do not allow construction loads in excess of HS-20 vehicles to cross the completed box culvert unless it is internally braced. Design the support for such bracing so as not to impair the structural integrity or severely interfere with the hydraulics of the box culvert or its invert. Have the culvert manufacturer review the details of the bracing and submit them to the Engineer for approval.

3.6 Headwalls. Construct concrete headwalls, when required, according to the plans. Apply masonry coating to exposed surfaces of the headwalls when required by Subsection 601.03.18, B). When using an aluminum structure, coat aluminum surfaces that will be in contact with concrete with alumilastic compound or an approved equal prior to placing concrete.

4.0 MEASUREMENT.

4.1 Structure Excavation. The Department will measure Structure Excavation as Structure Excavation, Common or Structure Excavation, Solid Rock according to Subsection 206.04.03, except on the sides of the structure the volume will be bounded by vertical planes 6 inches outside the footing pads or invert plates and parallel thereto.

The Department will measure material necessary for backfill in excess of the material excavated as Borrow Excavation, Roadway Excavation, or Embankment-in-Place, as applicable.

The Department will measure granular material used to replace excavated material that is unsuitable for backfill as Borrow Excavation, Roadway Excavation, or Embankment-in-Place. The Department will not measure earthwork for payment when the bid item is Embankment-in-Place unless the unsuitable material is wasted.

The Department will not measure flowable fill for payment and will consider it incidental to the structure.

The Department will not measure bedding for payment and will consider it incidental to the structure.

4.2 Aluminum Structural Plate Box Culvert. The Department will measure the

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quantity in linear feet at each location. The Department will consider the number of linear feet in each installation to be the plan length, increased or decreased by authorized adjustments. The Department will not measure ribs, wales, stiffeners, footing pads, toewalls, endwalls, internal braces, or asphalt coating for payment and will consider them incidental to the structure.

4.3 Steel Structural Plate Box Culvert. See 4.2.

4.4 Class A Concrete. The Department will measure Class A Concrete in footings and headwalls according to Subsection 601.04.

4.5 Reinforcement. The Department will measure Steel Reinforcement in the footings and headwalls according to Subsection 602.04.

5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
20694EN	Aluminum Structural Plate Box Culvert	Linear Foot
20695EN	Steel Structural Plate Box Culvert	Linear Foot
----	Structure Excavation, as classified	See Section 603.05
----	Concrete, Class	See Section 601.05
----	Steel Reinforcement	See Section 602.05

The Department will consider payment as full compensation for all work required in this note.

June 15, 2012

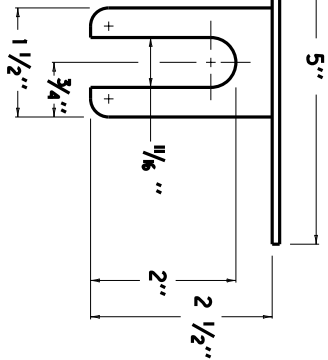
2012 STANDARD DRAWINGS THAT APPLY

092GR16P026-CB06

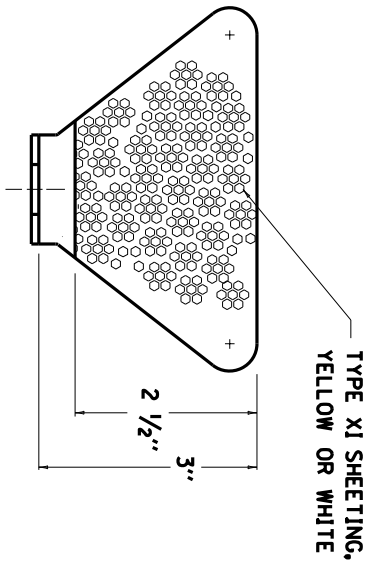
TYPICAL GUARDRAIL INSTALLATIONS	RBI-001-10
TYPICAL GUARDRAIL INSTALLATIONS	RBI-002-06
GUARDRAIL TERMINAL SECTIONS	RBR-010-05
GUARDRAIL POSTS.....	RBR-016-04
CHANNEL LINING CLASS II AND III	RDD-040-04
STEEL PIPE ARCH HEADWALLS – 0° SKEW (PIPE RISE 6’-0” OR GREATER)	RDH-405-02
DIMENSIONS STEEL PIPE ARCHES 0° SKEW & 15° SKEW.....	RDH-420-02
QUANTITIES FOR STEEL PIPE ARCHES 0°-15 °-30 ° & 45 ° SKEW	RDH-430-02
BILL OF REINFORCEMENT 7’-0” x5’-1” – 15’-4”x9”-3” STEEL PIPE ARCHES 0° SKEW	RDH-435-04
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS.....	RDI-012-02
NON-CIRCULAR PIPE ALTERNATES	RDI-016-02
PIPE BEDDING FOR CULVERTS, ENTRANCE AND STORM SEWER PIPE.....	RDI-020-08
PIPE BEDDING TRENCH CONDITION	RDI-025-04
TEMPORARY SILT FENCE	RDX-210-02
TEMPORARY SILT FENCE WITH WOVEN WIRE FENCE FABRIC	RDX-215
SILT TRAP - TYPE A	RDX-220-04
CURVE WIDENING AND SUPERELEVATION TRANSITIONS	RGS-001-06
MISCELLANEOUS STANDARDS PART 1	RGX-001-05
ONE POINT PROCTER FAMILY OF CURVES	RGX-200
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-05
NETTING.....	RRE-002-04
SHOULDER CLOSURE.....	TTC-135-01
POST SPLICING DETAIL.....	TTD-110-01
PAVEMENT CONDITION WARNING SIGNS.....	TTD-125
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-125-*01

NOTES

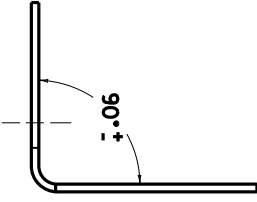
1. THE DELINEATOR'S SHAPE AND DIMENSIONS ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY. TYPES OF DELINEATORS PERMITTED SHALL BE FROM THE LIST OF APPROVED MATERIALS.
2. DELINEATOR SHALL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE EACH AND SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR ONE COMPLETE INSTALLATION.
3. CODE
1982 DELINEATOR FOR GUARDRAIL - MONO DIRECTIONAL WHITE
1983 DELINEATOR FOR GUARDRAIL - MONO DIRECTIONAL YELLOW
1987 DELINEATOR FOR GUARDRAIL - BI-DIRECTIONAL WHITE
PAY ITEM
1982 DELINEATOR FOR GUARDRAIL - MONO DIRECTIONAL WHITE
1983 DELINEATOR FOR GUARDRAIL - MONO DIRECTIONAL YELLOW
1987 DELINEATOR FOR GUARDRAIL - BI-DIRECTIONAL WHITE
EACH
EACH
EACH
PAY UNIT
4. GUARDRAIL DELINEATORS SHALL BE REQUIRED ON ALL GUARDRAIL.
5. DELINEATORS SHALL BE MANUFACTURED FROM 12 GA. GALVANIZED STEEL.
6. DIMENSIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MANUFACTURER'S TOLERANCES.
7. WHEN CONCRETE BARRIERS EXTEND ACROSS BRIDGE STRUCTURES IN LIEU OF STEEL BEAM GUARDRAIL, DELINEATORS SHALL BE INSTALLED AT SAME VERTICAL ALIGNMENT AS ON THE GUARDRAIL, AND DELINEATORS SHALL COMPLY WITH CURRENT SEP1A DRAWING 004.
8. DELINEATORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



PLAN VIEW

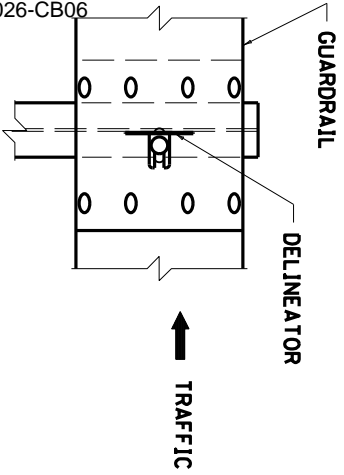


FRONT VIEW

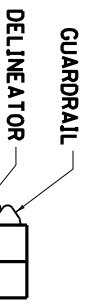


SIDE VIEW

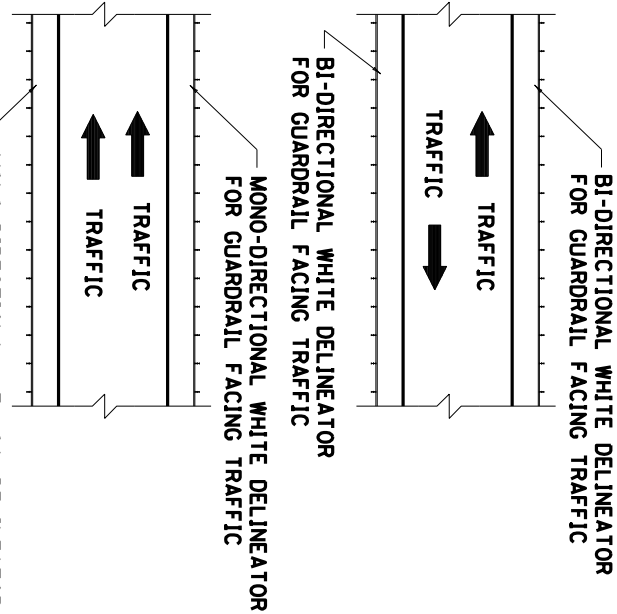
NOTE: DIMENSIONS SHOWN ARE FOR ONE VERSION OF A WEB-MOUNTED GUARDRAIL DELINEATOR. DELINEATORS WITH ALTERNATE DIMENSIONS MAY BE CONSIDERED FOR INCLUSION ON THE APPROVED PRODUCTS LIST.



FRONT VIEW



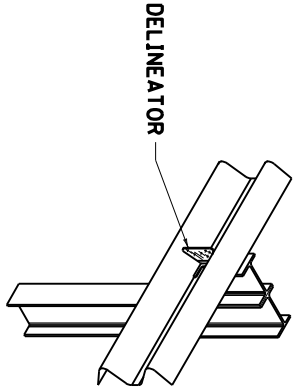
SIDE VIEW



PLACEMENT OF DELINEATORS FOR GUARDRAIL

APPROXIMATE DELINEATOR SPACING	
TANGENT	100'
CURVE	50'

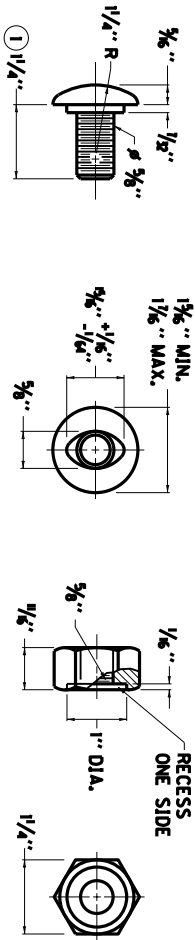
SPACING SHOULD BE ADJUSTED IN CURVES SO THAT SEVERAL DELINEATORS ARE ALWAYS SIMULTANEOUSLY VISIBLE TO THE ROAD USER.



ISOMETRIC VIEW

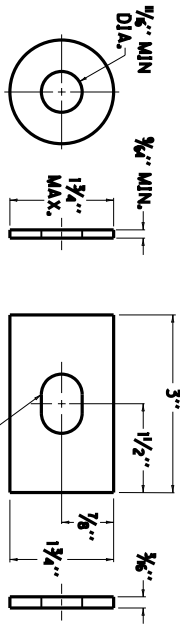
KENTUCKY DEPARTMENT OF HIGHWAYS
DELINEATORS FOR GUARDRAIL

SUBMITTED 6-15-2012 DATE
DIRECTOR DIVISION OF DESIGN
002



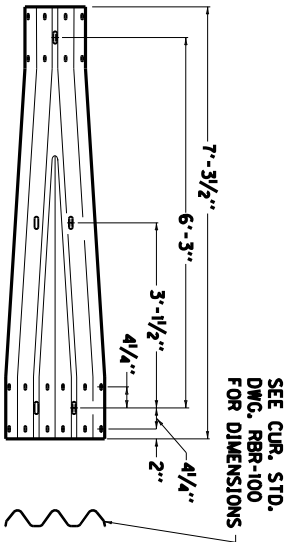
3/8" BUTTON HEAD BOLT AND RECESSED NUT

- NOTES**
- 1 RAIL BOLT SIMILAR EXCEPT LENGTH.
 - 2 THE THREE BEAM TO "W" BEAM CONNECTOR SHALL COMPLY WITH AASHTO M-180 CLASS A, TYPE 2 EXCEPT WHERE IN CONFLICT WITH THIS DETAIL.



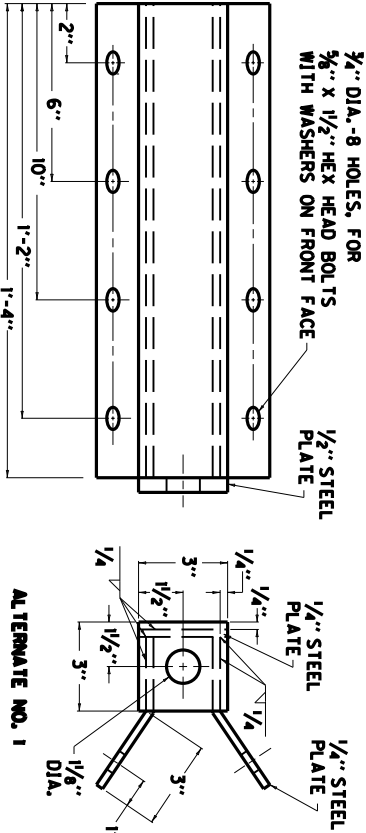
ROUND WASHER AND RECTANGULAR PLATE WASHER

SEE CUR. STD.
DWG. RBR-001
FOR DIMENSIONS

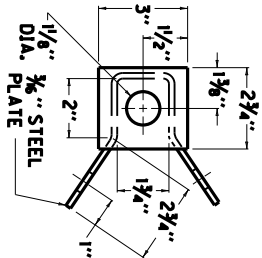


SEE CUR. STD.
DWG. RBR-100
FOR DIMENSIONS

THREE BEAM TO "W" BEAM CONNECTOR 2




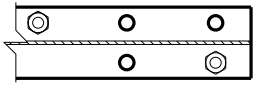
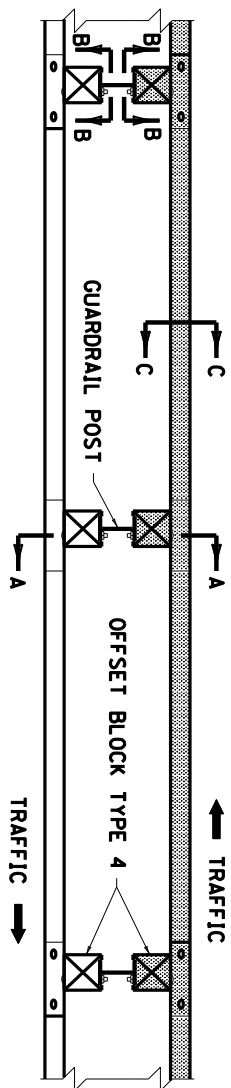
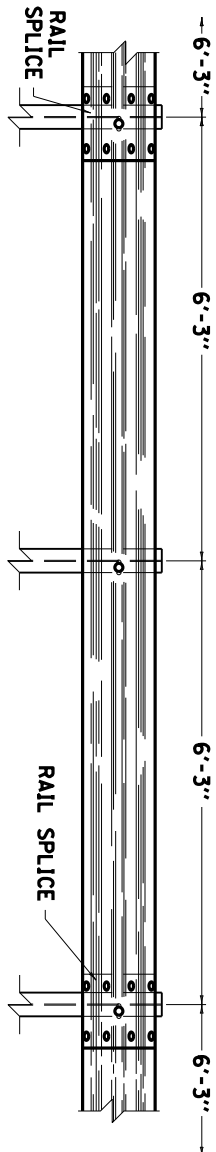
ALTERNATE NO. 1



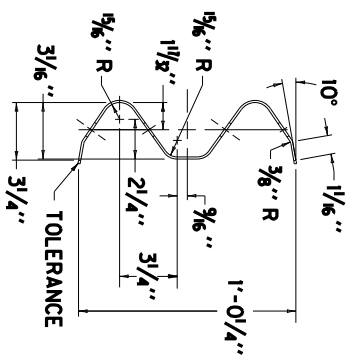
ALTERNATE NO. 2

RAIL ANCHOR ASSEMBLY

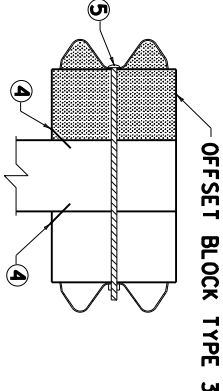
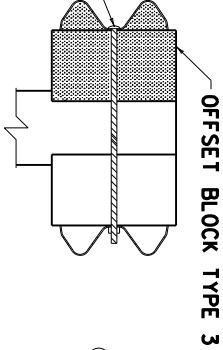
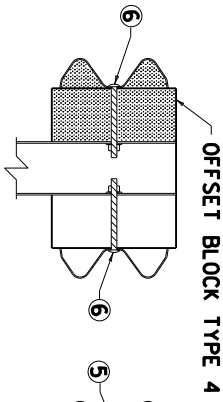
KENTUCKY DEPARTMENT OF HIGHWAYS
GUARDRAIL COMPONENTS
SUBMITTED:  6-15-2012 DATE
008



SECTION B-B
RAIL SPLICE ②



SECTION C-C
(RAIL CORRUGATED
SHEET STEEL BEAM)



SECTION A-A

DOUBLE FACE RAIL WITH
STEEL POST (W6x9)
(TIMBER OFFSET BLOCK)

SECTION A-A

DOUBLE FACE RAIL WITH
ROUND TIMBER POST

SECTION A-A

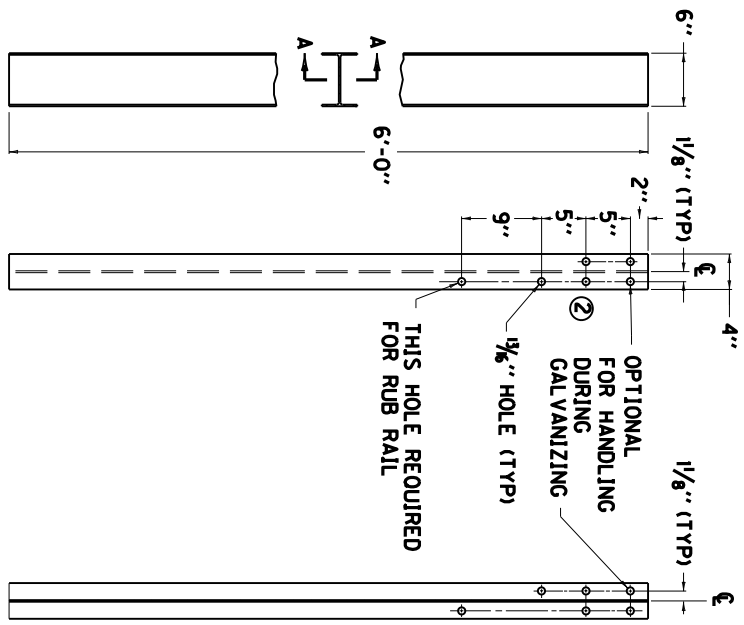
DOUBLE FACE RAIL WITH
TIMBER POST

NOTES

- THE CONTRACT UNIT PRICE BID SHALL BE:
GUARDRAIL-STEEL W BEAM-SINGLE FACE - LIN. FT.
OR
GUARDRAIL-STEEL W BEAM-DOUBLE FACE - LIN. FT.
- DIMENSIONAL TOLERANCES NOT SHOWN OR IMPLIED ARE
INTENDED TO BE THOSE CONSISTENT WITH THE PROPER
FUNCTIONING OF THE PART, INCLUDING ITS APPEARANCE
AND ACCEPTED MANUFACTURING PRACTICES.
- THE RAIL ELEMENT SHALL COMPLY WITH AASHTO M-180
-CLASS A, TYPE II.
- ALL LAPS SHALL BE PLACED IN THE DIRECTION OF TRAFFIC
FLOW,
- 1 TOLERANCE + 1/4", -1/4"
 - 2 8 - 5/8" x 1 1/4" LONG BUTTON HEAD BOLTS AND HEX HEAD
RECESS NUTS REQUIRED FOR EACH RAIL SPLICE.
 - 3 LENGTH EQUALS POST AND BLOCK WIDTH PLUS: 2"
FOR BOLT OR 2 1/4" FOR TREADED ROD.
 - 4 GALVANIZED STEEL 10G COMMON COATED NAIL (DRIVE
NAIL AT THE TOP OR BOTTOM CENTER OF BLOCK AND
POST AFTER BOLT IS INSTALLED).
 - 5 3/8" x ③ STEEL TREADED ROD AND TWO (2) HEX
HEAD NUTS OR 3/8" x ③ BUTTON OR HEX HEAD BOLT
AND HEX HEAD NUT.
 - 6 5/8" x 8" BUTTON HEAD BOLT, HEX HEAD RECESS NUT
AND ONE 3/8" ROUND WASHER (TYP.). BOLT SHALL HAVE
A MINIMUM THREAD LENGTH OF 2".
- REQUIRED FOR DOUBLE RAIL
- 7 BOTH 12'-6" AND 25' LENGTHS OF "W" BEAM GUARDRAIL
SECTIONS WILL BE PERMITTED UNLESS OTHERWISE
DIRECTED BY THE ENGINEER.

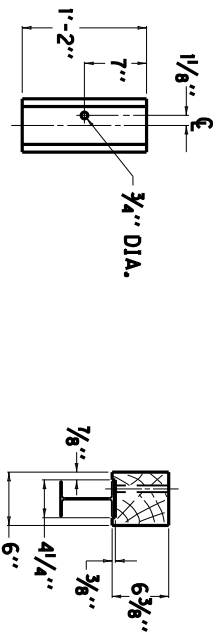
KENTUCKY DEPARTMENT OF HIGHWAYS
STEEL BEAM GUARDRAIL ("W" BEAM)

SUBMITTED DIRECTION DIVISION OF DESIGN
12-11-12 DATE
012



SIDE VIEW FRONT VIEW SECTION A-A

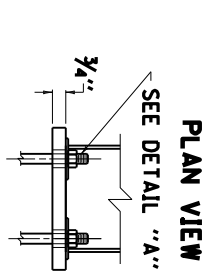
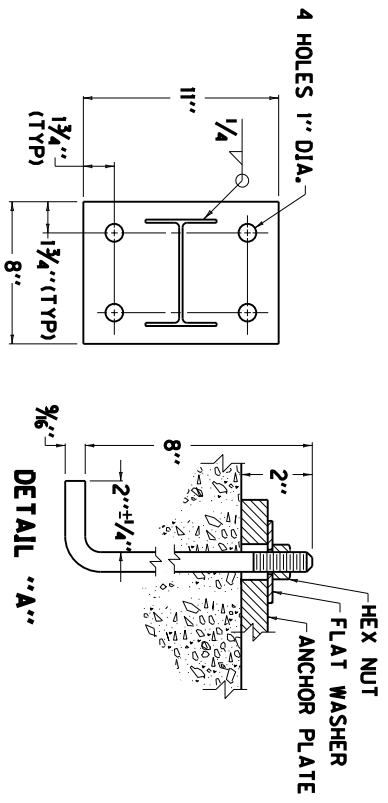
~ W6 X 9.0 STEEL POST ① ~




REAR ELEVATION PLAN VIEW

OFFSET BLOCK TYPE 4
(TIMBER)
(FOR USE WITH STEEL POST ONLY)

- ~ NOTES ~
- ① W6 X 8.5 IS AN ACCEPTABLE ALTERNATE.
 - ② THESE HOLES REQUIRED FOR ATTACHING RAIL.



PLAN VIEW
SIDE VIEW
ANCHOR PLATE

KENTUCKY DEPARTMENT OF HIGHWAYS	
GUARDRAIL POSTS	
SUBMITTED: 	DATE: 9-27-13
013	

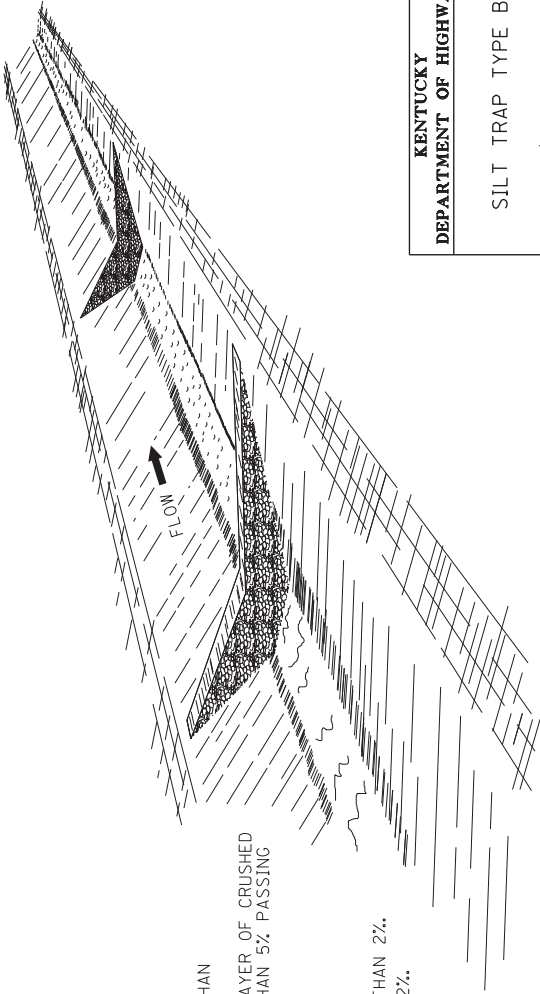
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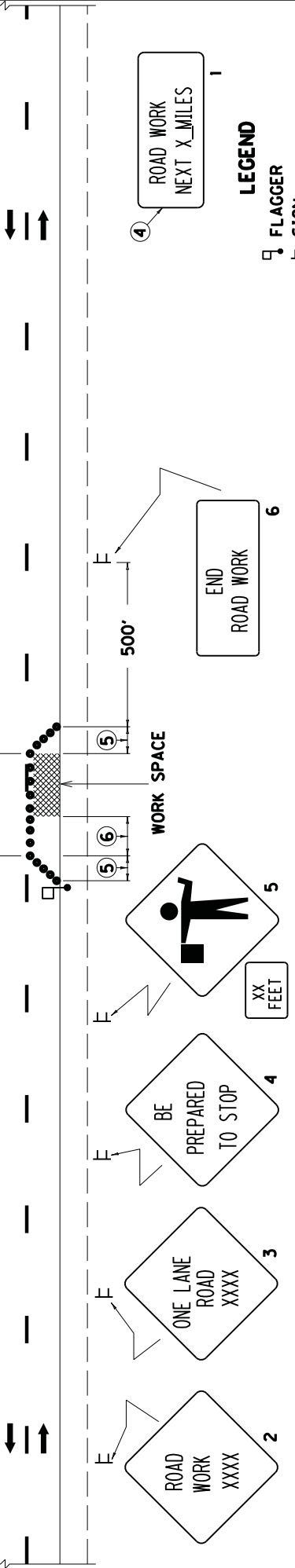
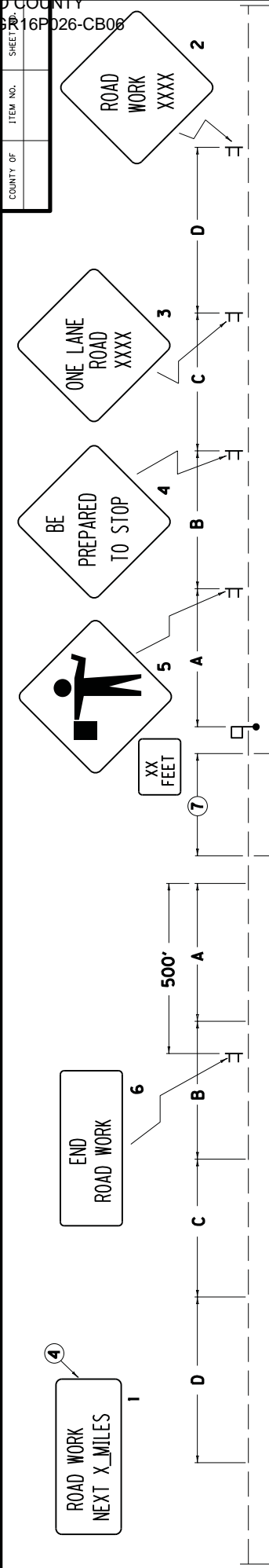
~NOTES~

BID ITEM AND UNIT TO BID:		PAY UNIT
CODE	PAY ITEM	EACH
2704	SILT TRAP TYPE B	EACH
2707	CLEAN SILT TRAP TYPE B	EACH
①	MIDDLE OF SILT TRAP SHALL BE A MINIMUM OF 3' AND 12" FROM EACH SIDE, SO FLOW WILL NOT BYPASS TRAP OR BYPASS TRAP.	
②	UPSTREAM FACE OF SILT TRAP SHALL BE A FLOW AGGREGATE HAVING 100% PASSING A 3" SIEVE AND 85% PASSING A NO. 8 SIEVE. (SEE SECTION --A-A--).	

- ① MIDDLE OF SILT TRAP SHALL BE A MINIMUM OF 1'-0" LOWER THAN SIDES SO FLOW WILL NOT BYPASS TRAP OR ERODE BANKS.
- ② UPSTREAM FACE OF SILT TRAP SHALL BE A FOUR INCH MIN. LAYER OF CRUSHED AGGREGATE HAVING 100% PASSING A 3" SIEVE AND NO MORE THAN 5% PASSING A NO. 8 SIEVE (SEE SECTION "A-A").
- ③ "L" = $\frac{\text{SLOPE OF DITCH}}{\text{H}}$
- ④ SPACE SILT TRAPS AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
5. SILT TRAP TYPE B SHALL BE USED ON ALL SLOPES GREATER THAN 2%.
6. SILT TRAP TYPE B MAY BE USED ON ALL SLOPES LESS THAN 2%.



KENTUCKY DEPARTMENT OF HIGHWAYS	
SILT TRAP TYPE B	
SUBMITTED _____ <i>[Signature]</i>	7-18-13 DATE
016	



- LEGEND**
- FLAGGER
 - SIGN
 - CHANNELIZING DEVICES
 - CONES
 - DRUMS
 - TYPE II BARRICADES
 - TUBULAR MARKERS
- 1.** THE SIZE OF SIGNS 2 THRU 5 SHALL BE 48" X 48" WITH 30" X 24" SUPPLEMENTAL PLAQUES FOR EXPRESSWAYS/FREEWAYS. THE MINIMUM SIZE OF SIGNS 2 THRU 5 SHALL BE 36" X 36" WITH 24" X 18" SUPPLEMENTAL PLAQUES FOR OTHER ROADWAYS. SIGN NOS. 1 AND 6 SHALL BE 48" X 24" FOR EXPRESSWAYS/FREEWAYS AND 36" X 18" FOR OTHER ROADWAYS. A FREEWAY SHALL BE DEFINED AS A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS. AN EXPRESSWAY SHALL BE DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
- 2.** THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. FLAGGER STATIONS SHALL BE LOCATED FAR ENOUGH IN ADVANCE OF THE ACTIVITY AREA SO THAT APPROACHING ROAD USERS WILL HAVE SUFFICIENT DISTANCE TO STOP BEFORE ENTERING THE WORK SPACE (REFER TO TABLE 6C-2 OF THE MUTCD). ILLUMINATION SHALL BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT.
- 3.** DRUMS OR TYPE II BARRICADES SHALL BE USED IN LIEU OF CONES OR TUBULAR MARKERS IF CLOSURE EXTENDS INTO NIGHTTIME HOURS.
- 4.** SIGN NO. 1 SHOULD BE INSTALLED AT THE LIMITS OF THE PROJECT WHEN THE CONSTRUCTION ZONE IS LONGER THAN TWO MILES IN LENGTH. THE DISTANCE SHOWN SHALL BE STATED TO THE NEAREST WHOLE MILE.
- 5.** TAPERS SHALL BE 50' (MIN) TO 100' (MAX) IN LENGTH. SPACING OF CHANNELIZING DEVICES SHOULD BE 20' THRU THE TAPER AREAS.
- 6.** BUFFER SPACE (OPTIONAL). IF USED, THE BUFFER SPACE SHOULD BE EXTENDED SO THAT THE TWO-WAY TRAFFIC TAPER IS PLACED BEFORE A HORIZONTAL OR CREST VERTICAL CURVE TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE FLAGGER AND A QUEUE OF STOPPED VEHICLES.
- 7.** SPACING OF CHANNELIZING DEVICES THRU THE ACTIVITY AREA SHOULD BE 80'. ON ROADWAYS WITH WIDTHS LESS THAN 20 FEET, CHANNELIZING DEVICES MAY BE OMITTED THRU THE ACTIVITY AREA BASED ON ENGINEERING JUDGMENT.
- 8.** WHEN NIGHTTIME WORK IS BEING PERFORMED, FLOODLIGHTS SHOULD BE USED TO ILLUMINATE THE WORK AREA.

APPLICATION

THIS DRAWING APPLIES TO LANE CLOSURES ON TWO-LANE, TWO DIRECTION HIGHWAYS.

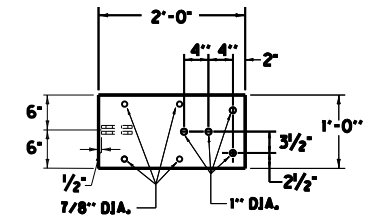
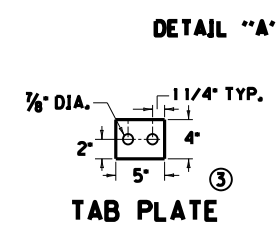
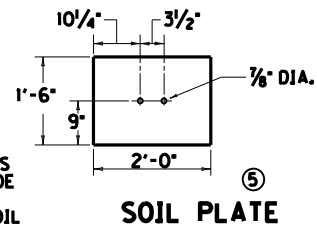
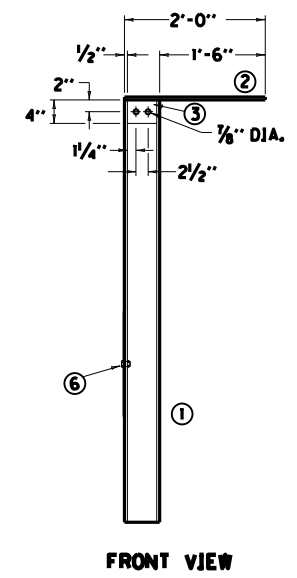
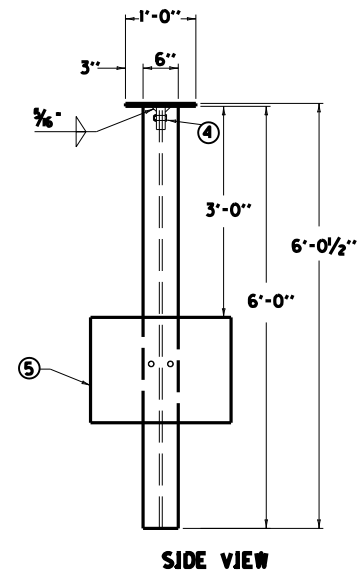
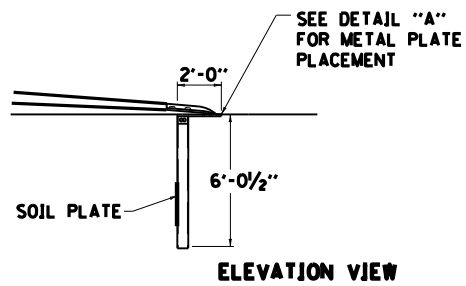
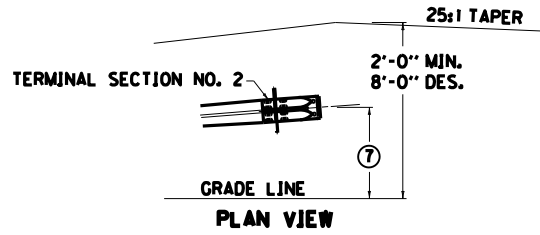
ROAD TYPE	A	B	C	D
EXPRESSWAY/ FREEWAY	1000'	500'	1100'	2600'
SP. LT. ≥ 45 MPH	500'	500'	500'	1100'
SP. LT. ≤ 40 MPH	250'	250'	250'	250'

•NOTE: USE NORMAL POSTED SPEED LIMIT

KENTUCKY
DEPARTMENT OF HIGHWAYS

**LANE CLOSURE
TWO-LANE HIGHWAY**

SUBMITTED *R. [Signature]* 8-29-13 DATE
0176



METHOD OF MEASUREMENT AND BASIS OF PAYMENT

GUARDRAIL END TREATMENT TYPE 7 SHALL BE TO THE PAY LIMITS AS DETAILED AND THE CONTRACT UNIT PRICE EACH SHALL INCLUDE TERMINAL SECTION NO. 2, STEEL "W" BEAM GUARDRAIL (SINGLE FACE), GUARDRAIL POSTS MI, STEEL ANCHOR PLATE AND POST, SOIL PLATE, TAB PLATES, EXCAVATION, LABOR, HARDWARE AND ALL INCIDENTALS NECESSARY FOR THE INSTALLATION.

BID ITEM AND UNIT TO BID:
GUARDRAIL END TREATMENT TYPE 7 - EACH

CONSTRUCTION REOUIREMENTS

SPLICE BOLTS AT TERMINAL SECTION NO. 2 SHALL BE LOOSELY TJGHTENED AND CENTERED TO ALLOW MAXIMUM MOVEMENT DUE TO EXPANSION. ONE (1) 1/2" ROUND WASHER AND (1) RECTANGULAR PLATE WASHER REQUIRED FOR EACH SPLICE BOLT, AT TERMINAL SECTION NO. 2.

- THE DESJIREABLE OFFSET DISTANCE FROM THE NORMAL GUARDRAIL LINE SHALL BE 4'-0". THE MINIMUM OFFSET DISTANCE FROM THE NORMAL GUARDRAIL LINE IS ZERO FEET.
- SEE CURRENT STD. DWG. RBR-001, RBR-005, RBR-010 AND RBR-015 FOR APPLICABLE DETAILS AND SPECIFICATIONS.
- LEAVE CLEARNACE IN BETWEEN TAB PLATES FOR GALVANIZED W6 x 15 W-BEAM POST.

BILL OF MATERIAL		
NO.	QTY.	DESCRIPTION
①	1	W6x15 W-BEAM
②	1	2' x 1' x 1/2" ANCHOR PLATE ASSEMBLY
③	2	4' x 5' x 1/2" TAB PLATE
④	2	3/4" DIA. x 2 1/2" HEAVY HEX HD BOLT w/NUT & (2) FLAT WASHERS
⑤	1	2' x 18" x 1/4" SOIL PLATE
⑥	2	3/4" DIA. x 2" HEAVY HEX HD BOLT w/NUT & (2) FLAT WASHERS

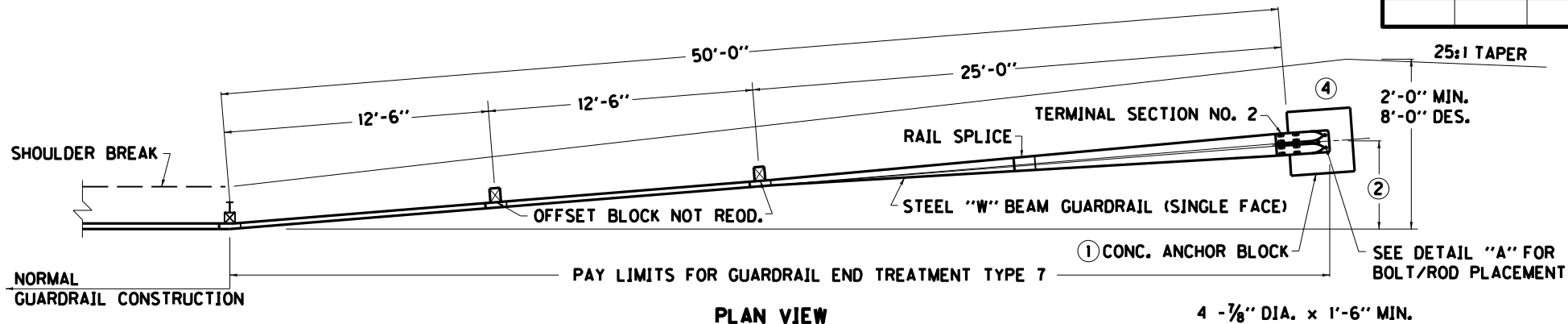
KENTUCKY
DEPARTMENT OF HIGHWAYS

**GUARDRAIL END
TREATMENT TYPE 7
ALTERNATE ANCHOR**

SUBMITTED: *William P. Stahel* 1-15-15
DATE

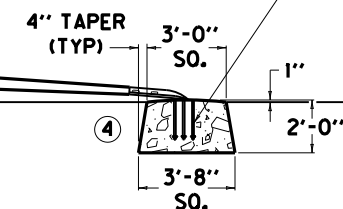
021

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USER: Jeff.Lail
DATE PLOTTED: February 2, 2015
E-SHEET NAME:
MicroStation v8.11.7.443



PLAN VIEW

4 - 7/8" DIA. x 1'-6" MIN.
ANCHOR BOLTS
---OR---
THREADED RODS (HEX NUTS
AND FLAT WASHERS)



ELEVATION VIEW

NOTES

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

GUARDRAIL END TREATMENT TYPE 7 SHALL BE TO THE PAY LIMITS AS DETAILED AND THE CONTRACT UNIT PRICE EACH SHALL INCLUDE TERMINAL SECTION NO. 2, STEEL "W" BEAM GUARDRAIL (SINGLE FACE), GUARDRAIL POSTS MI, CONCRETE ANCHOR BLOCK, EXCAVATION, LABOR, HARDWARE AND INCIDENTALS NECESSARY FOR THE INSTALLATION.

BID ITEM AND UNIT TO BID:

GUARDRAIL END TREATMENT TYPE 7 - EACH

CONSTRUCTION REQUIREMENTS

SPLICE BOLTS AT TERMINAL SECTION NO. 2 SHALL BE LOOSELY TIGHTENED AND CENTERED TO ALLOW MAXIMUM MOVEMENT DUE TO EXPANSION. ONE (1) 1/2" ROUND WASHER AND ONE (1) RECTANGULAR PLATE WASHER REQUIRED FOR EACH SPLICE BOLT, AT TERMINAL SECTION NO. 2.

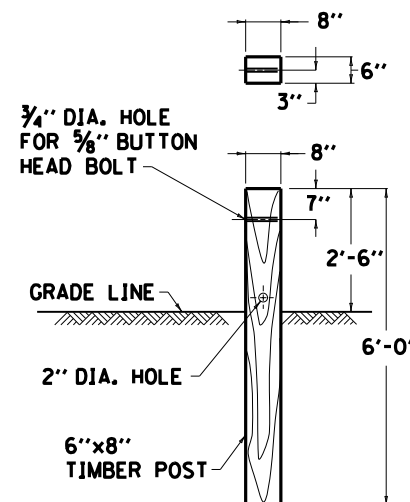
- ① THE CONCRETE ANCHOR BLOCK MAY BE PRECAST OR CAST-IN-PLACE. WHEN THE CONCRETE ANCHOR BLOCK IS CAST-IN-PLACE FORMING OF THE SIDES SHALL BE REQUIRED.
- ② THE DESIREABLE OFFSET DISTANCE FROM THE NORMAL GUARDRAIL LINE SHALL BE 4'-0". THE MINIMUM OFFSET DISTANCE FROM THE NORMAL GUARDRAIL LINE IS ZERO FEET.

MATERIAL REQUIREMENTS

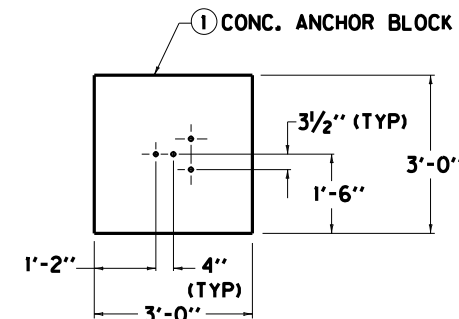
SEE CURRENT STD. DWG. RBR-001, RBR-005, RBR-010, AND RBR-015 FOR APPLICABLE DETAILS AND SPECIFICATIONS.

APPROX. QUANTITY FOR ANCHOR BLOCK: 0.83 CU. YD. CLASS "A" CONCRETE FOR TYPE 7 INSTALLATION.

3. THIS GUARDRAIL END TREATMENT IS NOT FOR USE ON APPROACH END ON HIGH SPEED NHS
- ④ SEE STANDARD DRAWING RBR-051 FOR ALTERNATE END ANCHOR.



MI POST DETAIL



DETAIL "A"

USE WITH CUR. STD. DWG.
RBR-051

KENTUCKY
DEPARTMENT OF HIGHWAYS

GUARDRAIL
END TREATMENT
TYPE 7

SUBMITTED: *William P. Hubel* 7-22-14
DATE

022

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

LABOR AND WAGE REQUIREMENTS APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS

- I. Application
- II. Nondiscrimination of Employees (KRS 344)
- III. Payment of Predetermined Minimum Wages
- IV. Statements and Payrolls

I. APPLICATION

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

II. NONDISCRIMINATION OF EMPLOYEES

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual

because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

III. PAYMENT OF PREDETERMINED MINIMUM WAGES

1. These special provisions are supplemented elsewhere in the contract by special provisions which set forth certain predetermined minimum wage rates. The contractor shall pay not less than those rates.

2. The minimum wage determination schedule shall be posted by the contractor, in a manner prescribed by the Department of Highways, at the site of the work in prominent places where it can be easily seen by the workers.

IV. STATEMENTS AND PAYROLLS

1. All contractors and subcontractors affected by the terms of KRS 337.505 to 337.550 shall keep full and accurate payroll records covering all disbursements of wages to their employees to whom they are required to pay not less than the prevailing rate of wages. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of one (1) year from the date of completion of this contract.

2. The payroll records shall contain the name, address and social security number of each employee, his correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made and actual wages paid.

3. The contractor shall make his daily records available at the project site for inspection by the State Department of Highways contracting office or his authorized representative.

Periodic investigations shall be conducted as required to assure compliance with the labor provisions of the contract. Interrogation of employees and officials of the contractor shall be permitted during working hours.

Aggrieved workers, Highway Managers, Assistant District Engineers, Resident Engineers and Project Engineers shall report all complaints and violations to the Division of Contract Procurement.

The contractor shall be notified in writing of apparent violations. The contractor may correct the reported violations and notify the Department of Highways of the action taken or may request an informal hearing. The request for hearing shall be in writing within ten (10) days after receipt of the notice of the reported violation. The contractor may submit

records and information which will aid in determining the true facts relating to the reported violations.

Any person or organization aggrieved by the action taken or the findings established as a result of an informal hearing by the Division of Contract Procurement may request a formal hearing.

4. The wages of labor shall be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payments, the contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.

5. No fee of any kind shall be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.

6. No laborers shall be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.

7. Every employee on the work covered by this contract shall be permitted to lodge, board, and trade where and with whom he elects and neither the contractor nor his agents, nor his employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board or trade at a particular place or with a particular person.

8. Every employee on the project covered by this contract shall be an employee of either the prime contractor or an approved subcontractor.

9. No charge shall be made for any transportation furnished by the contractor or his agents to any person employed on the work.

10. No individual shall be employed as a laborer or mechanic on this contract except on a wage basis, but this shall not be construed to prohibit the rental of teams, trucks or other equipment from individuals.

No Covered employee may be employed on the work except in accordance with the classification set forth in the schedule mentioned above; provided, however, that in the event additional classifications are required, application shall be made by the contractor to the Department of Highways and (1) the Department shall request appropriate classifications and rates from the proper agency, or (2) if there is urgent need for additional classification to avoid undue delay in the work, the contractor may employ such workmen at rates deemed comparable to rates established for similar classifications provided he has made written application through the Department of Highways, addressed to the proper agency, for the supplemental rates. The contractor shall retroactively adjust, upon receipt of the supplemental rates schedule, the wages of any employee paid less than the established rate and may adjust the wages of any employee overpaid.

11. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any work-week in which he is employed on such work, to work in excess of eight hours in any calendar day or in excess of forty hours in such work-week unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such work-week. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. This agreement shall be in writing and shall be executed prior to the employee working in excess of eight (8) hours, but not more than ten (10) hours, in any one (1) calendar day.

12. Payments to the contractor may be suspended or withheld due to failure of the contractor to pay any laborer or

mechanic employed or working on the site of the work, all or part of the wages required under the terms of the contract. The Department may suspend or withhold payments only after the contractor has been given written notice of the alleged violation and the contractor has failed to comply with the wage determination of the Department of Highways.

13. Contractors and subcontractors shall comply with the sections of Kentucky Revised Statutes, Chapter 337 relating to contracts for Public Works.

Revised 2-16-95

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Kentucky Equal Employment Opportunity Act of 1978

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under ***Vendor Information, Standard Attachments and General Terms*** at the following address:
<https://www.eProcurement.ky.gov>.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

General Decision Number: KY160102 03/25/2016 KY102

Superseded General Decision Number: KY20150102

State: Kentucky

Construction Type: Highway

Counties: Allen, Ballard, Butler, Caldwell, Calloway, Carlisle, Christian, Crittenden, Daviess, Edmonson, Fulton, Graves, Hancock, Henderson, Hickman, Hopkins, Livingston, Logan, Lyon, Marshall, McCracken, McLean, Muhlenberg, Ohio, Simpson, Todd, Trigg, Union, Warren and Webster Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016
1	02/19/2016
2	03/25/2016

BRIN0004-002 06/01/2015

BALLARD, BUTLER, CALDWELL, CARLISLE, CRITTENDEN, DAVIESS, EDMONSON, FULTON, GRAVES, HANCOCK, HENDERSON, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCracken, MCLEAN, MUHLENBERG, OHIO, UNION, and WEBSTER COUNTIES

	Rates	Fringes
BRICKLAYER		
Ballard, Caldwell,		
Carlisle, Crittenden,		
Fulton, Graves, Hickman,		
Livingston, Lyon,		
Marshall, and McCracken		
Counties.....	\$ 29.52	13.37
Butler, Edmonson, Hopkins,		

Muhlenberg, and Ohio Counties.....	\$ 25.96	10.64
Daviess, Hancock, Henderson, McLean, Union, and Webster Counties.....	\$ 28.68	13.72

BRTN0004-005 06/01/2015

ALLEN, CALLOWAY, CHRISTIAN, LOGAN, SIMPSON, TODD, TRIGG, and
WARREN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 25.96	10.64

CARP0357-002 05/01/2015

	Rates	Fringes
CARPENTER.....	\$ 27.50	16.02
Diver.....	\$ 41.63	16.02
PILEDRIVERMAN.....	\$ 27.75	16.02

ELEC0369-006 05/27/2015

BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 30.01	15.65

ELEC0429-001 06/01/2015

ALLEN & SIMPSON COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 24.84	11.90

ELEC0816-002 06/01/2015

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,
FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES,
HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCracken & TRIGG COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 31.03	25.5%+6.35

Cable spicers receive \$.25 per hour additional.

ELEC1701-003 01/01/2015

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO,
UNION & WEBSTER COUNTIES:

	Rates	Fringes
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ELECTRICIAN.....\$ 30.15 14.69

Cable spicers receive \$.25 per hour additional.

ELEC1925-002 01/01/2015

FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):

	Rates	Fringes
CABLE SPLICER.....	\$ 25.00	10.27
ELECTRICIAN.....	\$ 24.55	11.51

ENGI0181-017 07/01/2015

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 29.95	14.40
GROUP 2.....	\$ 27.26	14.40
GROUP 3.....	\$ 27.68	14.40
GROUP 4.....	\$ 26.96	14.40

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Cherry Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Skid

Steer Machine with all Attachments; Switchman or Brakeman;
Throttle Valve Person; Tractair & Road Widening Trencher;
Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger;
Welding Machine; Well Points;& Whirley Oiler

GROUP 3 -All Off Road Material Handling Equipment, including
Articulating Dump Trucks; Greaser on Grease Facilities
servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine;
Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout
Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler;
Paving Joint Machine; Power Form Handling Equipment; Pump;
Roller (Earth); Steerman; Tamping Machine; Tractor (Under
50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where
the length of the boom in combination with the length of
the piling equals or exceeds 150 ft. - \$1.00 above Group 1
rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID
10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT
WORK.

IRON0070-005 06/01/2015

BUTLER COUNTY (Eastern eighth, including the Townships of
Decker, Lee & Tilford);
EDMONSON COUNTY (Northern three-fourths, including the
Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff,
Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda,
Sunfish & Sweden)

	Rates	Fringes
IRONWORKER		
Structural; Ornamental;		
Reinforcing; Precast		
Concrete Erectors.....	\$ 27.56	20.30

IRON0103-004 08/01/2015

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION &
WEBSTER COUNTIES
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey,
Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport,
Monford, Morgantown, Provo, Rochester, South Hill & Welchs
Creek);
CALDWELL COUNTY (Northeastern third, including the Township of
Creswell);
CHRISTIAN COUNTY (Northern third, including the Townships of
Apex, Crofton, Kelly, Mannington & Wynns);
CRITTENDEN COUNTY (Northeastern half, including the Townships
of Grove, Mattoon, Repton, Shady Grove & Tribune);
MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction,
Benton, Brennen, Browder, Central City, Cleaton, Depoy,
Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City,

Martwick, McNary, Millport, Moorman, Nelson, Paradise,
Powderly, South Carrolllton, Tarina & Weir)

	Rates	Fringes
Ironworkers:.....	\$ 28.14	18.675

IRON0492-003 05/01/2014		

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES
BUTLER COUNTY (Southern third, including the Townships of
Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar
Grove & Woodbury);
CHRISTIAN COUNTY (Eastern two-thirds, including the Townships
of Bennettstown, Casky, Herndon, Hopkinsville, Howell,
Masonville, Pembroke & Thompsonville);
EDMONSON COUNTY (Southern fourth, including the Townships of
Chalybeate & Rocky Hill);
MUHLENBERG COUNTY (Southern eighth, including the Townships of
Dunnior, Penrod & Rosewood)

	Rates	Fringes
Ironworkers:.....	\$ 24.33	11.48

* IRON0782-006 05/01/2015		

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN,
LIVINGSTON, LYON, MARSHALL, MCCracken & TRIGG COUNTIES
CALDWELL COUNTY (Southwestern two-thirds, including the
Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown,
Dulaney, Farmersville, Fredonia, McGowan, Otter Pond &
Princeton);
CHRISTIAN COUNTY (Western third, Excluding the Townships of
Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky,
Herndon, Hopkinsville, Howell, Masonville, Pembroke &
Thompsonville);
CRITTENDEN COUNTY (Southwestern half, including the Townships
of Crayne, Dycusburg, Frances, Marion, Mexico, Midway,
Sheridan & Told)

	Rates	Fringes
Ironworkers:		
Projects with a total contract cost of \$20,000,000.00 or above.....	\$ 27.09	20.66
All Other Work.....	\$ 26.00	19.86

LABO0189-005 07/01/2015		

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN,
LIVINGSTON, LYON, MARSHALL & MCCracken COUNTIES

Rates	Fringes
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Laborers:		
GROUP 1.....	\$ 22.30	12.46
GROUP 2.....	\$ 22.55	12.46
GROUP 3.....	\$ 22.60	12.46
GROUP 4.....	\$ 23.20	12.46

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Blaster; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-006 07/01/2014

ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG & WARREN COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 22.66	11.10
GROUP 2.....	\$ 22.91	11.10
GROUP 3.....	\$ 22.96	11.10

GROUP 4.....\$ 23.56 11.10

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Blaster; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0561-001 07/01/2015

CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 21.86	13.30
GROUP 2.....	\$ 22.11	13.30
GROUP 3.....	\$ 22.16	13.30
GROUP 4.....	\$ 22.76	13.30

LABORER CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines;

Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3- Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Blaster; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

PAIN0032-002 05/01/2015

BALLARD COUNTY

	Rates	Fringes
Painters:		
Bridges.....	\$ 32.56	15.18
All Other Work.....	\$ 30.26	15.18
Spray, Blast, Steam, High & Hazardous (Including Lead Abatement) and All Epoxy - \$1.00 Premium		

PAIN0118-003 06/01/2014

EDMONSON COUNTY:

	Rates	Fringes
Painters:		
Brush & Roller.....	\$ 18.50	11.97
Spray, Sandblast, Power		
Tools, Waterblast & Steam		

Cleaning.....\$ 19.50 11.97

PAIN0156-006 04/01/2015

DAVISS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER
COUNTIES

Rates Fringes

Painters:

BRIDGES

GROUP 1.....\$ 27.60	12.85
GROUP 2.....\$ 27.85	12.85
GROUP 3.....\$ 28.60	12.85
GROUP 4.....\$ 29.60	12.85

ALL OTHER WORK:

GROUP 1.....\$ 26.45	12.85
GROUP 2.....\$ 26.70	12.85
GROUP 3.....\$ 27.45	12.85
GROUP 4.....\$ 28.45	12.85

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast;
Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch
Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal
Tar Epoxy

PAIN0456-003 01/01/2015

ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN
COUNTIES:

Rates Fringes

Painters:

BRIDGES

Brush & Roller.....\$ 23.25	9.95
Spray; Sandblast; Power Tools; Waterblast & Steam Cleaning.....\$ 24.25	9.95

ALL OTHER WORK

Brush & Roller.....\$ 19.25	9.95
Spray; Sandblast; Power Tools; Waterblast & Steam Cleaning.....\$ 20.25	9.95

ALL OTHER WORK - HIGH TIME PAY

Over 35 feet (up to 100 feet) - \$1.00 above base wage

100 feet and over - \$2.00 above base wage

DURING SPRAY PAINTING AND SANDBLASTING OPERATIONS, POT
TENDERS SHALL RECEIVE THE SAME WAGE RATES AS THE SPRAY
PAINTER OR NOZZLE OPERATOR

PAIN0500-002 06/01/2015

CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON,
GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCracken
& TRIGG COUNTIES:

	Rates	Fringes
Painters:		
Bridges.....	\$ 26.85	12.35
All Other Work.....	\$ 20.60	12.35

Waterblasting units with 3500 PSI and above - \$.50 premium
Spraypainting and all abrasive blasting - \$1.00 premium
Work 40 ft. and above ground level - \$1.00 premium

PLUM0184-002 07/01/2013

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,
FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCracken
and TRIGG COUNTIES

	Rates	Fringes
Plumber; Steamfitter.....	\$ 33.11	14.83

* PLUM0502-004 08/01/2015

ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN

	Rates	Fringes
Plumber; Steamfitter.....	\$ 32.00	19.13

PLUM0633-002 07/01/2015

DAVIESS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN,
MUHLENBERG, OHIO, TODD, UNION & WEBSTER COUNTIES:

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 31.54	14.78

TEAM0089-003 03/30/2014

ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES

	Rates	Fringes
Truck drivers:		
Zone 1:		

Group 1.....	\$ 19.58	17.83
Group 2.....	\$ 19.76	17.83
Group 3.....	\$ 19.84	17.83
Group 4.....	\$ 19.86	17.83

GROUP 1 - Greaser; Tire Changer

GROUP 2 - Truck Mechanic; Single Axle Dump; Flat Bed; All Terrain Vehicles when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors

GROUP 3 - Mixer All Types

GROUP 4 - Winch and A-Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker; Euclid and Other Heavy Earth Moving Equipment; Low Boy; Articulator Cat; Five Axle Vehicle

TEAM0215-003 03/31/2013

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO
& WEBSTER COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 20.93	16.85
Group 2.....	\$ 21.16	16.85
Group 3.....	\$ 21.23	16.85
Group 4.....	\$ 21.24	16.85

GROUP 1: Greaser, Tire Changer

GROUP 2: Truck Mechanic

GROUP 3: Single Axle Dump; Flat Bed; All Terrain Vehicle when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors; Mixer All Types

GROUP 4: Euclid and other heavy earth moving equipment; Low Boy; Articulator Cat; 5 Axle Vehicle; Winch and A- Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker

TEAM0236-001 03/31/2013

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCracken, TODD & TRIGG COUNTIES

Rates	Fringes
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TRUCK DRIVER

Group 1.....	\$ 19.38	16.85
Group 2.....	\$ 19.56	16.85
Group 3.....	\$ 19.56	16.85
Group 4.....	\$ 19.66	16.85
Group 5.....	\$ 19.64	16.85

GROUP 1: Greaser, Tire Changer

GROUP 2: Truck Mechanic

GROUP 3: Single Axle Dump; Flat Bed; All Terrain Vehicle when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Drivers of Distributors

GROUP 4: Euclid and other heavy earth moving equipment; Low Boy; Articulator Cat; Five Axle Vehicle; Winch and A-Frame when used in transporting materials; Ross Carrier

GROUP 5: Mixer All Types

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing

the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-15-I-HWY dated July 20, 2015.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director
Division of Construction Procurement
Frankfort, Kentucky 40622
502-564-3500

PART IV

INSURANCE

INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form – not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

Report Date 3/31/16

Section: 0001 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	80.00	TON		\$	
0020	00190		LEVELING & WEDGING PG64-22	20.00	TON		\$	
0030	00212		CL2 ASPH BASE 1.00D PG64-22	100.00	TON		\$	
0040	00301		CL2 ASPH SURF 0.38D PG64-22	120.00	TON		\$	
0050	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	28.00	EACH		\$	
0060	02014		BARRICADE-TYPE III	24.00	EACH		\$	
0070	02353		INSTALL GUARDRAIL-STEEL W BM-S FACE	1,350.00	LF		\$	
0080	02360		GUARDRAIL TERMINAL SECTION NO 1	2.00	EACH		\$	
0090	02371		GUARDRAIL END TREATMENT TYPE 7	12.00	EACH		\$	
0100	02484		CHANNEL LINING CLASS III	80.00	TON		\$	
0110	02562		TEMPORARY SIGNS	600.00	SQFT		\$	
0120	02650		MAINTAIN & CONTROL TRAFFIC SITE 1 KY 505 004-005	1.00	LS		\$	
0130	02650		MAINTAIN & CONTROL TRAFFIC SITE 2 KY 1414 000-001	1.00	LS		\$	
0140	02650		MAINTAIN & CONTROL TRAFFIC SITE 3 KY 1414 002-003	1.00	LS		\$	
0150	02650		MAINTAIN & CONTROL TRAFFIC SITE 4 KY 1414 007-008	1.00	LS		\$	
0160	02676		MOBILIZATION FOR MILL & TEXT SITE 1 - KY 505 004-005	1.00	LS		\$	
0170	02676		MOBILIZATION FOR MILL & TEXT SITE 2 - KY 1414 000-001	1.00	LS		\$	
0180	02676		MOBILIZATION FOR MILL & TEXT SITE 3 - KY 1414 002-003	1.00	LS		\$	
0190	02676		MOBILIZATION FOR MILL & TEXT SITE 4 - KY 1414 007-008	1.00	LS		\$	
0200	02677		ASPHALT PAVE MILLING & TEXTURING	90.00	TON		\$	
0210	02726		STAKING SITE 1 - KY 505 004-005	1.00	LS		\$	
0220	02726		STAKING SITE 2 - KY 1414 000-001	1.00	LS		\$	
0230	02726		STAKING SITE 2 - KY 1414 002-003	1.00	LS		\$	
0240	02726		STAKING SITE 4 - KY 1414 007-008	1.00	LS		\$	
0250	06510		PAVE STRIPING-TEMP PAINT-4 IN	800.00	LF		\$	
0260	06514		PAVE STRIPING-PERM PAINT-4 IN	800.00	LF		\$	
0270	08003		FOUNDATION PREPARATION SITE 1 KY 505 004-005	1.00	LS		\$	
0280	08003		FOUNDATION PREPARATION SITE 2 KY 1414 000-001	1.00	LS		\$	
0290	08003		FOUNDATION PREPARATION SITE 3 KY 1414 002-003	1.00	LS		\$	
0300	20257NC		SITE PREPARATION SITE 1 KY 505 004-005	1.00	LS		\$	
0310	20257NC		SITE PREPARATION SITE 2 KY 1414 000-001	1.00	LS		\$	
0320	20257NC		SITE PREPARATION SITE 3 KY 1414 002-003	1.00	LS		\$	

Report Date 3/31/16

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0330	20257NC		SITE PREPARATION SITE 4 KY 1414 007-008	1.00	LS		\$	
0340	21415ND		EROSION CONTROL SITE 1 - KY 505 004-005	1.00	LS		\$	
0350	21415ND		EROSION CONTROL SITE 2 - KY 1414 000-001	1.00	LS		\$	
0360	21415ND		EROSION CONTROL SITE 3 - KY 1414 002-003	1.00	LS		\$	
0370	21415ND		EROSION CONTROL SITE 4 - KY 1414 007-008	1.00	LS		\$	
0380	24575ES610		HEADWALL REINFORCED CONCRETE - 114" EQUIVALENT PIPE CULVERT WITH PAVING AND APRONS	2.00	EACH		\$	
0390	20694EN	AA1	ALUMINUM STRUCTURAL PLATE BOX CULVERT 16'-2"X5'-1"	27.00	LF		\$	
0400	20695EN	AA2	STEEL STRUCTURAL PLATE BOX CULVERT 16'-2"X5'-1"	27.00	LF		\$	
0410	20694EN	BB1	ALUMINUM STRUCTURAL PLATE BOX CULVERT 11'-4"X5'-0"	32.00	LF		\$	
0420	20695EN	BB2	STEEL STRUCTURAL PLATE BOX CULVERT 11'-4"X5'-0"	32.00	LF		\$	
0430	20694EN	CC1	ALUMINUM STRUCTURAL PLATE BOX CULVERT 16'-2"X5'-1"	32.00	LF		\$	
0440	20695EN	CC2	STEEL STRUCTURAL PLATE BOX CULVERT 16'-2"X5'-1"	32.00	LF		\$	
0450	22533EN	DD1	ALUMINUM ALLOY STRUCT PLATE PIPE ARCH 114" EQUIVALENT	41.00	LF		\$	
0460	22534EN	DD2	STEEL STRUCTURAL PLATE PIPE ARCH 114" EQUIVALENT	41.00	LF		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0470	02569		DEMOBILIZATION	1.00	LS		\$	